Lectures
ON
AFFECTIONS OF THE EYE IN RELATION TO MEDICINE AND SURGERY.

Delivered at the Harveian Society,

BY HENRY POWER, M.B. LOND., F.R.C.S. ENG.,
SENIOR OPHTHALMIC SURGEON AND LECTURER ON OPHTHALMIC SURGERY, ST. BARTHOLOMEW'S HOSPITAL.

LECTURE I.

GENTLEMEN,—In considering how I could best fulfil the intentions with which this series of lectures was instituted by the founders, and render serviceable such knowledge as a somewhat lengthened experience in the treatment of affections of the eye has given me, I have thought that I might with most advantage take up those forms of ophthalmic disease that are of the most frequent occurrence, those which the members of this Society are certain to meet with in the pursuit of their profession, and the treatment of which they are in many instances compelled to undertake. I have sometimes regretted to hear practitioners say they know nothing of diseases of the eye, and that they regard it as a special subject which is too vast in extent to allow them even to attempt to learn. I hold rather that every surgeon and physician should be familiar with ophthalmic disease, though it may not be given to each to become a skilful operator. There are many affections which every practitioner may be called upon to treat, and upon whose knowledge the patient would confidently rely, though few might be willing to submit themselves for the operations of cataract, artificial pupil, or squint to any but those who are accustomed to this work, because it is well known to the laity that such proceedings require constant practice, proper instruments, and experience in the after-treatment.

The formation of special departments in all our hospitals for the investigation and treatment of particular forms of disease has its advantages and disadvantages. On the one hand, by collecting in one place and at the same time a large number of patients suffering from disease of the same organ, excellent opportunities are afforded for studying their relations, for classifying them into groups, for recognising minute distinctions, and of following their course and observing the effects of treatment. It is, moreover, of great importance to the teacher, by enabling him to make his lectures clinical, and to demonstrate upon the living subject the points on which he dwells in the class-room. It is of still greater value to the student, by facilitating his work and affording him, if he is intelligent and attentive, the opportunity of seeing many examples of the diseases of each organ in a very short space of time. Lastly, it is of the greatest value to the patient, by giving him the services of skilled and highly trained men, at whose disposal are all the appliances that experience can suggest. These are undoubted advantages. On the other hand, there are some disadvantages in the system. By withdrawing all or nearly all the patients suffering from the diseases of a particular organ from the general wards, it becomes imperative that the student should attend in the special wards, or he is likely to leave the hospital entirely ignorant of a whole class of diseases. But as a matter of fact the requirements of modern examinations are such that the student can hardly spare any time from that which he must devote to the pursuit of general medicine and surgery, in order to follow particular branches. He may perhaps once or twice in the course of his last year present himself in the special wards, but he finds himself almost in another atmosphere. Not only the diseases, but their very names, are new to him. He quickly perceives that some considerable time and a succession of visits must be paid to prove of service, and he either thinks he will postpone his labours in this direction to a more convenient season, when he forgets to return, or which perhaps never comes, or he comforts himself by reflecting that even if he is perfectly ignorant of the diseases of the eye he may still manage to struggle through his examination, providing he can escape the single written question on such subject which it is just to say is often given in his paper, whilst if the exigencies of his future practice ever cross his mind, he comforts himself with the reflection that in the event of his being called upon to treat a difficult case he will always be able to obtain a special opinion, or if the worst comes, and an eye is lost, nature has given us two, and a man can see nearly as well with one as with both. I need hardly say how suddenly a change comes over him with the first serious case that occurs in practice. It may be of iritis or of glaucoma. Then the possibilities of blindness in his patient force themselves upon him, resulting, he cannot but feel, from his own ignorance. The professors of obstetric medicine and surgery are in some of these respects placed at an advantage to the ophthalmic surgeon. In the first place, gynæcology forms a very important and, indeed, essential part of the medical curriculum. The student is well aware that he will be strictly examined upon it. He has to obtain special certificates showing that he has attended so many lectures and so many cases, and he has had it well drummed into him, if his father happen to be a practitioner, that a knowledge of it is absolutely necessary in country practice, and will always prove serviceable to him whether he practise at home or abroad, whilst he knows that it is not at all unlikely he may be called upon to treat a difficult case upon his own responsibility at an early period of his career, and under circumstances in which his proceedings are sure to be sharply criticised.

In making these observations I trust I may not be regarded as in any way discrediting the knowledge of diseases of the eye possessed by a large and steadily increasing number of practitioners, nor of under-estimating their zeal and attention in the study of these affections. Many men now leave our hospitals with a very sound practical knowledge of this class of affections, and in after-life obtain the opinion and assistance of a specialist only when an operation is required, or to obtain his support to a line of treatment they have themselves inaugurated, and as a safeguard against subsequent mishap. There can be no doubt, however, that what is done by the few more intelligent students should be rendered imperative on all, and that the time at the disposal of the student should include another year to enable him to pursue the study of medicine and surgery in the special departments of the eye, ear, larynx, and skin, and that the attendance upon lectures and in the wards, and the attainment of some knowledge in these subjects, should be rendered compulsory. That space of time would be sufficient to familiarise the student with the principal forms of disease and with the use of the instruments employed in the diagnosis and treatment of each class of affection, such as the ophthalmoscope, laryngoscope, Eustachian catheter, and the like; and the student would thus be better prepared for the battle of life, and cases of iritis, in which adhesions have been allowed to occur which might have been prevented, and cases of glaucoma which have been allowed to progress till the patient is blind, and beyond the resources of surgery happily even now rare, would be altogether unknown.

The most painstaking student, however, after the lapse of a few years is apt to become a little rusty in departments which do not often fall under his notice, and things that were once very familiar are quite forgotten. This is especially the case with the use of the ophthalmoscope, which not only takes some time to learn, but is soon lost, for few cases fall to the lot of the young practitioner to enable him to keep up his knowledge, and after the lapse of some years he hesitates to rely on his own judgment to decide whether the margins of the optic disc are in a given case really blurred and indistinct, or whether the media are cloudy, or whether it is only an error of refraction, or what degree of whiteness of the optic nerve has passed beyond physiological limits. I am therefore somewhat doubtful whether the ophthalmoscope will ever be widely used by the general surgeon; and I have thought, remembering the practical character of our meetings, that it would prove acceptable to the members of the Society, if instead of attempting to give a description of exceptional forms of internal disease of the eye, I were to discuss some of those affections which are of every-day occurrence, and to place before you such information as modern research has obtained upon diseases that every practitioner may be called upon to treat, or which his advice may prevent. I propose then to take as the subjects of these lectures purulent ophthalmia, keratitis, and myopia.

Before commencing the subject of purulent ophthalmia, perhaps I may be allowed briefly to describe the anatomy and histological characters of the conjunctiva, which will enable me to explain more intelligibly the changes that occur in dis-

ease. It is, as is well known, a mucous membrane which lines the lids, and is continuous with the skin at their margin anteriorly, whilst posteriorly it is reflected upon the globe. It is thus divisible into a tarsal and an ocular or bulbar portion, which are connected by a fold, termed the conjunctival fold, or retrotarsal portion of the membrane. The tarsal portion is composed of mucous membrane directly and firmly applied to the tarsal cartilage, with little or no submucous connective tissue. This part is highly vascular, and presents numerous small, low, conical papillæ near the free edge, which become broader and more prominent near the sinus. The deeper epithelial cells are columnar, the more superficial tesselated. Distributed amongst them are many goblet cells. The ocular portion of the membrane is destitute of papillæ, and presents flattened epithelium. The submucous tissue contains much elastic tissue in the fold, and is therefore very extensible, and, as in the scleral portion, contains a few small collections of fat cells. The conjunctiva and the sclerotic are very closely united near the border of the cornea, but rather loosely elsewhere. The vessels are divisible into two sets, the superficial and the deep. The superficial arteries are derived in part from the ophthalmic muscular branches, and in part from the anterior ciliary arteries; the deep, or episcleral, arteries spring from the muscular and from the palpebral arteries, and are comparatively few. The superficial veins are few in number, and communicate at the periphery of the cornea with the canal of Schlemm. The deep veins are numerous, and end in the muscular veins. The nerves are derived from the ophthalmic division of the fifth pair; they present many terminal bulbs. The glands of the conjunctiva are the acinous glands, or glands of Krause, sometimes also called accessory lacrymal glands. These are particularly found in the upper fold of the conjunctiva, arranged transversely from the inner extremity of the lacrymal gland towards the inner part of the eyelid, in which direction they increase in size. Usually there are from twelve to eighteen, though Krause in one instance counted forty-two. In the fold of the lower lid there are only from two to six. The excretory duct is thin-walled, and perforates the conjunctiva obliquely. Besides these there are certain spherical or completely closed follicles, which very closely resemble the solitary glands of the intestine, and lie immediately beneath the surface of the membrane. They possess an investing membrane, and are traversed by a plexus of connective tissue, in the meshes of which are numerous leucocytes, resembling or identical with lymph-corpuscles. Loops of bloodvessels appear in their interior on section. Their diameter is about 0·4 mm., or about one-fiftieth of an inch, and they are chiefly found in the fornix according to Krause, though Waldeyer denies their existence, and thinks that, if there be any in man, they are only to be found scattered here and there. In the ox they form masses known as the "plaques de Bresch," which are sometimes regarded as normal and sometimes as abnormal textures. The lymphatics of the conjunctiva bulbi are very numerous, but they are more sparingly present in the other portions of the membrane. At the margin of the cornea they form a delicate close-meshed plexus of very fine vessels with dilatations at the points of junction. The plexus terminates towards the cornea in a series of flat arches, and this ring of vessels, having a breadth of about one millimetre, is named the circulus lymphaticus; sometimes a single large vessel forms the boundary of the plexus and surrounds the cornea in a somewhat interrupted circular form. This is connected with a number of radially arranged vessels proceeding from the cornea itself, whilst other vessels proceed to the lids, and, running laterally inwards or outwards, open into vessels provided with valves, which again enter the superficial facial lymphatic glands and the submaxillary glands. The lymphatics everywhere occupy a position subjacent to the bloodvessels.

Having thus epitomised the chief facts in the histology of the conjunctiva, I may now pass on to consider that form of disease which is termed purulent ophthalmia, and especially that form of it which is apt to occur in the new-born child, the well-known ophthalmia neonatorum. Estimates have been given by different authors of the number of cases of blindness referable to this cause that are found in blind asylums. By one writer it is placed as high as 70 per cent. The tables of Cohn, however, which are of recent date, seem to show that diseases of the conjunctiva, though constituting nearly one-half of all the diseases of the eye, yet in the form of the purulent ophthalmia of infants is the cause of only 33 per cent. of all cases of blindness, whether in or out of asylums, occurring between the ages of five and twenty years. At every ophthalmic hospital cases continue to present themselves which are evidently suffering from the consequences of this disease. In the worst cases the eye is atrophied and squared by the action of the recti muscles or reduced to a button; in others the cornea is perfectly opaque or is replaced by cicatricial tissue, proving that it has formerly been violently inflamed, and has sloughed. In others, again, the whole globe is enlarged, showing that the inflammation has softened the tissue of the sclerotic and cornea, and that they have yielded to the steady pressure of the contents of the globe, so that the eye bulges between the lids; whilst in the less severe cases a white spot, or leucoma, to the inner surface of which the iris is often adherent, indicates the former presence of a penetrating ulcer. In almost all of these latter cases the vision is greatly impaired, the pupil being displaced, and the capsule of the lens being often the seat of a deposit of lymph. Of course many of these cases have been under the care of midwives, or under no care at all; others are incurable from the moment they are first seen, resisting all remedial means; but in some I am disposed to think better results might have been obtained if the serious nature of the affection had been earlier recognised, and if the surgeon, instead of giving verbal directions to perhaps a careless or ignorant nurse, had himself taken the trouble to attend to the infant. It is in the early stages of the complaint that most advantage can be obtained from treatment; and on the principle that example is better than precept, the benefit obtained by the surgeon himself showing how the remedies should be applied, is far better than any instructions, however clear and precise they may be.

The general characters of the disease must be familiar to all my hearers, and I do not intend to enter very minutely into the symptoms. In the majority of cases the presence of yellow secretion first attracts notice, and the disease is said to commence upon the third day after birth; but it sometimes begins a little earlier, or is retarded to the fifth, sixth, or seventh day, or even somewhat later. The secretion rapidly increases; the conjunctiva, both of the lids and of the globe, becomes red and chemosed. The lids swell and assume a red or livid tint. The pain seems to be inconsiderable, or, at least, considering the violence of the inflammation, is not a characteristic feature of the disease, perhaps because the tissues are so loose that swelling is readily effected and there is little or no pressure on the nerves. The secretion, at first thin and yellowish, soon becomes thicker, with flocculi of puro-mucous material floating in it, and then of a full yellow colour, the very type of the pus laudabile of the older writers. On wiping it away, the surface of the lid often presents a kind of thin membrane which can be picked off with forceps, sometimes leaving only a reddened surface beneath it, but sometimes a bleeding surface, and then tending to the diphtheritic form. Hæmorrhage from the overcharged vessels sometimes occurs spontaneously, and frequently occurs on merely raising the lids. The eyes, owing to the swelling of the lids, are constantly kept in the closed condition, and the child is unable to raise them by the action of the levator palpebræ. Moreover, as the edges of the lids adhere in consequence of the drying up of the secretion during sleep, the pus accumulates behind them and bulges them out to a remarkable extent. After remaining for some time in this condition of acute inflammation, the disease, sometimes spontaneously, or with the aid only of simple remedies, begins to subside and passes into a chronic state, in which the conjunctiva remains villous and granular, with swollen papillæ, ready on slight provocation to suffer a relapse, but slowly tending to recovery. In a large number of cases, however, the nutrition of the cornea is interfered with by the obstruction to the capillary circulation in the ciliary region, and sooner or later it presents a partial or general haziness. When the cloud is partial, it is often situated near the periphery of the cornea, and close inspection will then show that at this point, and more or less concealed by the chemosed conjunctiva, there is an ulcer or sharply defined groove. When this has once formed the chances are greatly in favour of its becoming progressively deeper, and at length perforating; the aqueous then escapes, and the iris becomes applied to the inner surface of the opening. For a day or two no apparent harm is done, but soon a little black speck appears at the site of the ulcer, which is the delicate tissue of the iris thrust forward by the pressure of the aqueous accumulating behind it, and covered by the membrane of Descemet. It continues to increase till it becomes nearly

as large as the head of a fusee, producing a considerable amount of irritation and lacrymation. The protrusion may either remain, becoming invested with cicatricial tissue, or it may gradually flatten down and become nearly level with the rest of the cornea, leaving only a displaced pupil. Various opinions have been held as to whether the corneal lesions are due to the character and quality of the pus or to the degree of chemosis. It is certain that the mere contact of pus with the cornea is productive of but little harm. In cases of suppuration of the lacrymal sac pus is often poured into the conjunctival sac by regurgitation through the canaliculi, or through an artificial opening, for a considerable period without occasioning infiltration or ulceration of the tissue of the cornea, which remains bright and polished. The early period at which lesion of the cornea occurs, as well as the received views on the etiology of the disease, have led many to suspect that the pus may contain some virus capable of directly eroding its tissue. But it is obvious that a powerful disturbing influence must be exerted on the cornea by the chemotic infiltration of the conjunctiva, since, when this is strongly expressed, as it is in most cases of purulent ophthalmia, the vessels of the ciliary region must be compressed, the venous circulation retarded, and the conditions favourable to diapedesis or emigration of white corpuscles from the vessels induced. The importance of such compression is particularly well shown in cases of diphtheritic conjunctivitis, happily almost unknown in this country, though familiar enough to practitioners in Germany.

Arlt has justly observed that in the event of much chemosis and conjunctival infiltration occurring at the end of the second week, it is impossible ("Annal. d'Oc.," 1880, p. 182) in all instances to preserve the cornea from becoming the seat of an abscess, and virulent blennorrhœa may be held to have been present.

If the cornea becomes generally hazy, the prospect is very discouraging. The haziness gradually deepens into opacity; the cornea becomes softened; pus forms between the lamellæ; it yields at some part of the periphery, or gives way altogether. The lens escapes, and the eye collapses, no vestige of vision remaining. In such cases mothers sometimes bring the lenses in a pill-box or wrapped in paper, saying that these had escaped from the eye, and half expecting apparently that they may be replaced.

(To be continued.)

ON DYSENTERY AND LIVER ABSCESS.[1]

BY SIR JOSEPH FAYRER, M.D., F.R.S.,
PRESIDENT OF THE MEDICAL SOCIETY OF LONDON.

THE following example of liver abscess illustrates a form of disease which is not very uncommon among the numerous invalids who return from tropical or subtropical and malarial climates, and is more frequent in those who have resided in India or China than in Africa, the West Indies, or other colonies. I have therefore ventured to bring this case before you under the impression that it may prove of interest, and perhaps help to throw some light on a subject which, I know from experience, is not unfrequently brought under consideration in this city and its suburbs—indeed, throughout the United Kingdom generally, in almost every part of which are to be found old residents of our tropical and colonial possessions, who have returned with the seeds of disease, sown abroad, to be developed at home. Liver abscess, of course, is not confined to tropical countries; it may, and does, occur in our own islands, but is comparatively rare, and when it does happen is generally, if not always, due to septic absorption from some external wound or operation, some ulcer of the stomach, intestine, gall-bladder, or its ducts; in certain cases to ulceration or suppuration in the pelvic cavity, rectum, or ischio-rectal fossa; to fistula in ano; it may be to cancerous ulceration in the bowel or elsewhere, or to suppuration of a hydatid cyst. Such cases are generally to be regarded as of a secondary or pyæmic character, and differ widely from the large, frequently, though not always, single abscess, which, from its frequent occurrence in the tropics, has been termed by Murchison tropical abscess, though they are very similar to, if not identical with, certain dysenteric liver abscesses in which multiple foci of suppuration are due to septic absorption and constitutional pyæmic contamination from the dysenteric ulceration in the large intestine. As you are aware, tropical abscess of the liver is often seen in this country, but it is usually in the persons of those who have contracted the disease abroad, or who have developed it here as the result of disease from which they had suffered in the tropics. Now this form of liver abscess may be of different kinds. 1. The large single abscess, which is etiologically referable to the influences of heat, altered conditions of living, feeding, and the excessive or injudicious use of alcohol in tropical, subtropical, and malarial climates. The abscess is the expression of these pernicious influences, but it partakes more of the character of a local complaint, and is independent of ulceration of the bowel or of disease in any other part of the economy. In such cases the abscess is often large, is solitary, though there may be more than one, and is frequently preceded, especially in the strong and vigorous, by all the symptoms of active congestion and inflammation of acute hepatitis. In others, however, it assumes a more insidious and chronic form; with few well-marked symptoms, or such as escape notice, and the abscess is only revealed by unexpected bulging of the thorax, or pointing in the epigastric hepatic region, or by spontaneous evacuation of the contents through the lung, stomach, or bowels; in some rare cases it is not detected until after death, during post-mortem examination. 2. Liver abscess following, or co-existing with, dysentery, by Murchison and others was regarded as of a pyæmic nature, due to absorption of pus or septic matter from the ulcerated bowel, and therefore coming within the same category as liver abscess, originating in this country, and resembling it in its pathological character, and in being multiple. That this is the case in some instances cannot, I think, be doubted, and when the multiple abscess does occur in a dysenteric patient, perhaps no better explanation of its origin can be offered. Such a condition is, of course, one of extreme danger; indeed, it may be regarded as fatal. And here I would ask you to note the true character of these multiple abscesses, which in the outset are really no abscesses at all, but necrosis of small portions of the liver parenchyma, which, if the patient live long enough, become abscesses by suppuration occurring in the congested and inflamed liver tissue around the dead spot, which thus becomes detached and loose like the core of a boil in the centre of the cavity. I have repeatedly seen these so-called abscesses in all stages of development, from the spot of dead tissue or embolic infarct surrounded by its areola of congestion, to cavities of various sizes filled with sanies, puriform matter, and débris of liver tissue, and finally those in which real pus had formed. They are generally numerous and varying in size from a mere speck to a pea, from a marble to a walnut, an orange, or larger, and it frequently happens that they are not confined to the liver, but are found in other viscera, such as the spleen, kidneys, and lungs as well. These cases are truly pyæmic, and are, as I have said, most fatal.

It was thought by some pathologists that hepatitis and dysentery were dependent on each other. Annesley maintained that dysentery is the result of hepatitis; others that the hepatitis is the result of the dysentery. Dr. Budd, thirty-five years ago, put forth the opinion—and his view has met with much support in this country, though not in India—that liver abscess is always due to purulent absorption from the bowel, that, in fact, tropical liver abscess is pathologically identical with the liver abscess of this country. Dr. Abercrombie thought that though they co-existed they were independent of each other. Murchison, Macpherson, Maclean, and others concur in this. Martin and others thought that liver abscess was intimately connected with disease of the cæcum, but this has not been confirmed by post-mortem examination; for of 72 cases where the cæcum was affected in only 22 was there liver abscess. Moore of Bombay says that eight observers out of twelve record a percentage of 18, or 295 cases of liver abscess in 1532 of dysentery cases; four others give a ratio of 39 per cent., or 52 cases of abscess out of 131 cases of dysentery; 18 per cent. is probably the correct ratio. The larger percentage is more likely due to all diseased conditions of the liver that have accompanied dysentery. Recent observations, I think, confirm this view of the relative frequency of hepatic abscess in connexion with dysentery, and though in some instances of multiple abscess the condition is due to septic absorption, yet liver

[1] Read before the Medical Society of London, April 30th, 1883.

abscess generally must be regarded rather as an expression of the general disease than as a direct consequence of dysenteric ulceration of the large intestine. It would appear, then, that in different climates it is more or less frequent according to circumstances, but that there is a greater tendency to it in India than in other climates. In malarious countries liver abscesses frequently occur in association with remittent fever without any ulceration of the bowel (Morehead). Macpherson gives the comparative frequency of liver abscess in dysentery as varying from 13 per cent. in the General Hospital, Calcutta, to nearly 60 per cent. (according to Annesley) occurring in Madras.

I think it must be admitted that liver abscess and dysentery are often coexistent, or that one may follow on the other very closely, and that in a certain number the hepatic abscess is due to absorption from the diseased bowel, yet that the two diseases occur frequently, nay generally, quite independently of each other. Numerous post-mortem examinations have shown that liver abscess was unaccompanied by any signs of present or past ulceration in the bowels, whilst equally numerous cases of death from dysentery were unattended by abscess in the liver.

For the present I exclude from consideration the large single tropical abscess, in which there is no question of a dysenteric origin or complication, and now wish to direct attention to the question of the relations of liver abscess to dysentery when the symptoms of both diseases are present. The case I bring under your notice this evening is an example in point; and I would ask you to observe that although true dysenteric—i.e., pyæmic—abscess of the liver is of not uncommon occurrence, and is to the last degree dangerous, yet that not all abscess of the liver complicated with dysentery is of this grave form, and that a man may have dysentery and liver abscess too, and still may recover. And here I would remark that, although I regard some of the cases of dysenteric liver abscess as merely the result of a common cause affecting alike, though independently, both liver and bowel, yet that in others I believe the liver abscess may be the consequence of direct absorption of purulent matter through the liver from the bowel; in which case the abscess may be single or double, or triple, but this is a different state of things pathologically from that general pyæmic condition which results from infection of the whole system by absorption of septic matter from the degenerative ulceration; in which cases the mischief is multiple, and often general.

The relation of liver abscess to dysentery, I should say, might be briefly summarised as follows:—

1. The so-called abscesses which originate in local deaths of parenchyma (pyæmia, embolic deposits, or infarcts) are cavities varying in size from a mere speck to an orange, containing débris, sanies, puriform matter, leucocytes, and, finally, pus. They are seen in various stages of development, and are not necessarily confined to the liver, but occur in other viscera or regions of the body. These are truly pyæmic.

2. There is, I believe, a form of liver abscess co-existent with, and perhaps due to, dysentery, which is the result of direct absorption and transference of pus or septic matter from the bowel to the liver through the mesenteric veins. Such may be solitary, double, or triple. This is also a very dangerous form of the disease, though not necessarily fatal, as it is feared must always be the case in the former variety.

3. Dysentery, malarial fever, and hepatitis may co-exist, or supervene on each other as effects of common climatic cause; it seems natural to ascribe the liver abscess in such cases to the dysentery, but it is probable that they are rather coincidences than consequences of each other, and that the cause which affects the glandular structures of the large intestine may determine the mischief in the liver in certain climates and localities; such are obviously very different from those previously mentioned.

4. Lastly, I may just allude to the ordinary large and most frequently single tropical abscess, which is quite independent of dysentery, though, as just mentioned, it may co-exist with or follow it. Each or all of these forms may be brought under our notice in this country as the result of disease originally contracted in certain climates.

As to the extent to which hepatitis prevails in India the last statistical report gives the following information:—"In the European Army of India, averaging 57,742 men, 28,780 admissions and 1267 deaths were recorded under hepatitis during the ten-year period 1870 to 1879. This gives an admission rate of 49·8 and a death-rate of 2·19 per 1000. In the Army of Bengal the admission rate was 47·1 and the death-rate 2·04 per 1000. In the preceding ten-year period the admission rate was 59·2, and the death-rate 3·31 per 1000. A considerable reduction has thus taken place in both the admission and the death-rate, and the diminution has been pretty evenly distributed over the different sections of the Presidency. There were 7417 admissions and 349 deaths from hepatitis in the European Army of Madras during the years 1870 to 1879, an admission rate of 67·2 and a death-rate of 3·31 per 1000, much higher rates than those for Bengal. During the immediately preceding ten-year period the admission rate from hepatitis was 70·2, so that very little diminution has taken place in the frequency of this disease. During the period 1870 to 1879 there were 4234 admissions and 177 deaths from hepatitis in the European army of the Bombay Presidency, the admission rate being 40·9 and the death-rate 1·71 per 1000, slightly less than the corresponding rate for Bengal. For the years 1863–69 the average admission rate from this disease in Bombay was 26·6 per 1000. Hepatitis thus seems to have been more prevalent of late in the Bombay Presidency, an experience opposed to that of Bengal and Madras." The eighteenth annual report of the Sanitary Commissioner General of India for 1881 tells us that the admissions for hepatitis per 1000 men strength for that year were: Bengal 32, Madras 39, Bombay 29. The deaths per 1000 in the same period were: Bengal 1·64, Madras 1·54, Bombay 1·52 from the same cause. It further remarks that "of the chief diseases hepatitis was the only one which during 1881 yielded a higher death-rate than the preceding year—1·60 per 1000, against 1·34. The increase was, however, very trifling, and the admission rates are nearly identical. In Madras hepatic diseases in former years have prevailed to a greater extent than in the other Presidencies. The returns during the last two years have been very favourable, compared with the preceding ten-year period. Also that after anæmia and general debility the chief causes of invaliding in the army of India were: hepatitis, 2·96 per 1000; dysentery and diarrhœa, 2·83; phthisis, 2·21." As a great proportion of the deaths recorded under hepatitis were probably due to liver abscess, it will be seen how large the experience of the disease is in India.

With reference to the relative proportion in which liver abscess and dysentery were coincident or combined, Dr. Waring,[2] in 1854, made the following notes:—

Of 300 cases of fatal liver abscess in India, in only 82 cases, or in 27·3 per cent., was the hepatitis preceded by symptoms of dysentery. Of the 300 cases, the number of abscesses was not stated in 12. Of the remaining 288, 177 had one abscess, 33 had two abscesses, 11 had three, 17 had four, 10 had from five to ten or more, and 40 had more than ten.

Relative Frequency of Hepatitis in different Foreign Stations (Fayrer, Tropical Diseases.)

Year.	Strength.	Disease.	Admitted.	Died.	Invalided.
MADRAS.					
1870	9036	Hepatitis	635	41	131
1871	10,084	Hepatitis	713	41	58
1872	10,802	Hepatitis	586	5	70
—	—	Abscess	43	35	—
CHINA.					
1870	546	Hepatitis	15	0	1
1871	516	Hepatitis	8	0	0
1872	789	Hepatitis	15	1	0
—	—	Abscess	1	1	—
CAPE AND ST. HELENA.					
1870	2441	Hepatitis	66	4	16
1871	2473	Hepatitis	24	0	6
1872	2484	Hepatitis	23	1	3
WEST INDIES.					
1870	1492	Hepatitis	2	0	0
1871	906	Hepatitis	12	0	0
1872	1112	Hepatitis	2	—	2
—	—	Abscess	1	0	0
CANADA.					
1870	4519	Hepatitis	10	0	0
1871	2383	Hepatitis	12	1	1
1872	1602	Hepatitis	3	0	9
MALTA.					
1870	4799	Hepatitis	26	5	6
1871	4977	Hepatitis	26	2	7
1872	4855	Hepatitis	27	0	4
—	—	Abscess	2	1	0

I will conclude what I have to say with a few remarks on the question of puncturing liver abscess. In cases of true

[2] Inquiry into Abscess of Liver. (Memorandum, 1854, p. 125.)

pyæmic multiple abscess, even should the indications of the locality of these abscesses be clear, I fear no permanent benefit could be anticipated, though I think it is possible that if any one abscess caused much suffering the contents might be drawn off by an aspirating needle, and so temporary relief might be conferred. In cases where there is reason to believe that the abscess is single, and where bulging, pain, spasmodic contraction of rectus, and tenderness on pressure exist, whilst previous symptoms suggest the presence of pus, the condition may be verified by introducing a needle and examining the fluid drawn off through it. If it be pus the sooner it is all removed the better, and if it lie too deep for a free incision, by reason of the danger of cutting through the vascular liver substance, then I recommend you to draw it off through a large cannula, and, having done so, introduce a drainage-tube, taking care to exclude the entry of air; wherever it is possible I advocate a free incision, and a free drain through a drainage-tube, and for cases in which the matter lies deep I have devised a grooved cannula, on which you can enlarge the opening, and having given exit to the pus, introduce the drainage-tube. I may here remark that a certain amount of vascular liver tissue may be cut through to get at an abscess; the hæmorrhage will be profuse, but it will soon cease. I believe it is very essential that the antiseptic method of treatment should be strictly attended to, and you may, perhaps, remember a case which I had the honour of relating to you some time ago, in which it was attended with complete success. I advocate exploration to ascertain the presence of pus, early evacuation whenever it can be got at, and early and free opening; drainage, and antiseptic dressing whenever practicable.

CASE 1. *Dysentery and Liver Abscess opening through the Right Lung; Recovery.*—A young civil officer, aged twenty-four, of good constitution and temperate habits, had been in India about three years and a half. When with the forces in Afghanistan in Nov. 1881, he was attacked with erysipelas of the head and face whilst suffering from an attack of climatic fever. He was recovering from this at Sibi, when he was attacked with diarrhœa, which soon became dysentery. He was then sent off to Kurrachee, where he arrived early in January, 1882, and remained there under treatment. On Jan. 23rd, having improved in health, he went to Kinari, on the coast, but on the 27th, again feeling ill, with great lassitude, depression, and pain in the side and shoulder, with loss of appetite and sickness (these symptoms supervened, it is to be observed, just as the dysenteric symptoms were subsiding), he returned to Kurrachee, and was again placed under active treatment. He had fever and a temperature of above 100°; exact degree not noted. On Feb. 13th he was put on board a steamer and sailed for Bombay, where he arrived in three days, much improved by the sea voyage. On the 20th he left Bombay, crossed India by rail, and arrived at Monghyr on March 1st. During the month of March he had frequent recurrences of fever and pain, but contrived to do duty. Towards the end of the month he was seized one day, after riding twenty miles, with severe pain in the left side, which was attended with swelling. This was pronounced by the medical officer to be the result of a muscular strain, the consequence of a long ride on a rough, high-actioned horse. This pain and swelling subsided in about a week. He appears to have struggled on doing his duty as best he could until May, when great depression and utter inability to work came on. The medical officers reported his liver to be then much enlarged, and recommended that he should be sent to England at once. He, however, remained at Monghyr for some weeks. Towards the end of May he appears to have improved slightly, and so he continued till the middle of June, when sharp pain in the hepatic region, with difficulty of breathing, set in. A few days later, after dinner one day, a paroxysm of coughing set in, during which he brought up the contents of a liver abscess through the right lung. There were altogether five or six copious discharges of pus and blood by this channel, profuse at first, but diminishing with each attack. The last occurred on August 20th. On Sept. 4th he left India, and arrived in England in due time greatly improved by the voyage. A week after arrival he got a chill, which brought on a return of the liver pain. He was again confined to bed, and had poultices and nitro-muriatic acid. In October, being much better, he went to the south of England, and remained there till Dec. 12th, when he had a relapse. In January the right lung and pleura became affected, but he recovered (he seems to have had no further discharge of pus from the cavity), and since then has gradually regained his health and strength. In April, beyond feeling weak, he was well, and there is every reason to believe that he may be able to return to his duty by the next cold season.

This case traces in an interesting manner the passage of formation of a liver abscess and its relation to a previous attack of dysentery, which I am inclined to think was not of pyæmic character. It also gives a good idea of the difficulties and vicissitudes to which a patient may be exposed in India, and the vast extent of country over which he may have to travel before he finds relief.

CASE 2. *Dysenteric Multiple Abscess of Liver.*—G——, a Hindoo, aged twenty-four, was admitted Aug. 7th, and died Aug. 16th, 1880, at the Medical Hospital, Calcutta. Had diarrhœa and dysentery for a month; great pain over colon; fever; temperature ranging from 96·4° to 102·6°. Had passed sloughs with the gelatinous mucus and blood; no pain in the hepatic region. The post-mortem was made on Aug. 17th, twelve hours after death. Refer to "Tropical Diseases," page 91, for description and for Mr. Doran's examination of the liver, which is now in the College of Surgeons.

OCCASIONAL RECORDS IN THE SCIENCE AND PRACTICE OF SURGERY.

BY OLIVER PEMBERTON, F.R.C.S. ENG.,
SENIOR SURGEON, BIRMINGHAM GENERAL HOSPITAL, AND PROFESSOR OF SURGERY IN QUEEN'S COLLEGE.

LOOSE BODIES IN THE KNEE-JOINT.

IT must be accepted that our knowledge of the exact mode in which "loose bodies" form in joints is, to say the least, at this day uncertain. Practically our experience arises only from what happens in the knee; for although met with occasionally in the elbow and even the hip, they so seldom call for interference, and are comparatively so unimportant, that further reference to their presence elsewhere than the knee is unnecessary. That their origin in early adult life is in the main traumatic, I for my own part entertain little doubt. The pursuit of football may be fairly charged with establishing abundant proofs as to this. Thus, a few years since, I saw a gentleman of much muscular power, who, previously to encountering the struggle of the game on a given day, had sustained no injury to or had had any disorder of the knee whatever. He had fallen during the fight, and being unable to rise was carried off the field, and I was called to see him a few hours after the occurrence. When I examined the knee I found a considerable effusion had taken place within the joint, so as to render any exact judgment as to what had happened impossible. The effusion subsided with rest and he was able to walk; but in a few weeks came to me and said something moved in and outside the joint and had nearly thrown him down once or twice in walking. On examination I readily detected a movable body, about as large as an almond, situated just above the level of the patella on the inner side. I pointed out to him the desirability of removal, but he preferred a supporting case and I saw no more of him. After forty years of age the rheumatic diathesis exercises a chief influence in the production of the "loose body" leading to that typical calcification seen so frequently in the joint structures of aged rheumatic people. Assuredly my own experience leads me to the conclusion that injury is the chief factor in causing a chipping or breaking off of the joint surface, and that as time goes on the loose body thus produced is found to present appearances according to its age and, as it were, to the extent of the wear and tear in movement it has undergone: at one time being cartilaginous or fibrous, or osseous or mixed, as the case may be, the ultimate shaping and structure of the body being doubtless greatly influenced by the predominance of the rheumatic habit.

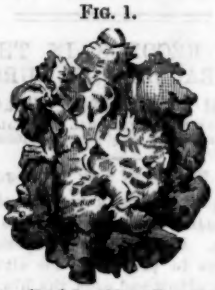
Those curious in the investigations as to other and widely different modes of origin, would do well to refer to the ninth chapter in Mr. Barwell's[1] treatise on diseases of the joints, and it must never be forgotten that Hunter's view as to the changes that blood effusions may assume, and so develop into these bodies, has always been regarded as a practical

[1] London, 1881, p. 267, Macmillan & Co.

solution of the origin of many, and it certainly, in my judgment, adds great weight to a belief in the doctrine of a traumatic origin for the greatest number. The inquiries of Poncet,[2] based on histological considerations, whilst admitting a traumatic origin for these "arthrophytes," strive to establish a distinction between these and those that have once been pedicled or attached, to the effect that the true traumatic ones never show any remains of a hilus or of any pedicle. I am unable myself to add to the value of these observations, but the subject of such a distinction is filled with interest for future verification.

CASE. *Long-standing Loose Body in Knee; Operation for removal; Treatment of Wound by Lister's Dressing; Recovery without Suppuration.*—J. L——, aged fifty-five, a rail-way guard, was admitted into hospital on Nov. 10th, 1880, on account of pain and swelling in the right knee. The patient was a strong, healthy-looking man. He stated that he had never injured the joint, nor had he been laid up with gout or rheumatism. For some time the knee had been giving way, feeling less strong, being occasionally swollen, and on and off for twenty years he had been aware of the presence of a movable body, which occasionally absolutely

FIG. 1.



Concave surface, lined by thin yellow covering, terminating all round in an elevated irregular margin, lightly and delicately fretted like a lace edging, and having the hardness and appearance of very white bone.

prevented the use of the limb. On examination the joint was seen to be larger than natural, due evidently to an increase in synovial fluid. There was no thickening, and no pain, save in movement. On the outer side, between the patella and the condyle, was felt, resting, a large substance, oblong in shape, irregular, thick, and freely movable. He thought that another, and smaller, substance had shifted about on occasions, but that the one described, and which alone presented at that moment, was the cause of all his trouble. On the 24th, "rendered safe by Listerism," I made an incision directly over the body, of two inches

FIG. 2.

Convex surface, of the same appearance uniformly as the margin in Fig. 1, but fretted all over, and without any yellow lining.

and a half long, opening the synovial bag to the same extent. Extrusion was not immediate, as in some cases, by expulsion, owing to the fringed edges of the body catching the lining membrane. To overcome this the handle of the scalpel was needed to turn it edgewise, when it readily slipped out. Synovia to the extent of a few drachms flowed through the wound, which was at once closely sutured without the insertion of a drainage-tube. In the after-progress the wound healed by the first intention, without suppuration, there being no rise in temperature and no constitutional disturbance of any kind. All dressings were discontinued in fourteen days, and he left the hospital, wearing his support, on Dec. 24th. I saw and examined him on the 4th inst. He was well in health, and moving about with a hinged case as guard at a level crossing. The affected knee was but a little larger than its fellow.

To Professor Tilden, F.R.S., and Professor Haycraft, of Mason's College, I am indebted for a chemical and microscopical examination.

Professor Tilden reports:—"Weight of the whole nearly 99 grains. It yields 65·3 per cent. of white ash, consisting of carbonate and phosphate of lime."

Professor Haycraft:—"The part examined consisted entirely of cartilage. This was not unlike the calcified rib of an aged person, the matrix of the cartilage being (especially near the cells) filled with ossified fibres. It is surrounded by a membrane which is clearly fibrillated, and of distinct thickness, but containing no stainable cells. It is probably a membrane of lymph which has deposited on the cartilage. Its thickness is about $\frac{1}{75}$ of an inch on an average."

There remains but to remark on the peculiar shaping of this body, the like of which I have not previously experienced. The need of the insertion of a drainage-tube for the first twenty-four hours must be determined by the amount of fluid in the synovial bag, and by the chance of blood passing in from the wound. As a rule a drainage-tube is advisable. Lastly, I ask, after six and thirty years' dealing with surgery of all kinds, what confidence should I have had in opening this man's joint at fifty-five years of age without danger to life or limb, but for that system of dressing the wound for which we are indebted to Joseph Lister?

Birmingham.

[2] Revue de Chirurgie, THE LANCET, November 11th, 1882.

ON BEDSIDE URINARY TESTS: DETECTION OF SUGAR IN THE URINE BY MEANS OF TEST PAPERS.[1]

BY GEORGE OLIVER, M.D. LOND., &c.

I HAVE just now shown you the qualitative working of the handy tests I wish to bring before you; they belong to the series of urinary test papers which, a few months ago, I proposed as substitutes for the bottles of nitric acid and Fehling's solution at the bedside.[2] The qualitative albumen precipitants I then brought forward have been extensively used by the profession, and I must now publicly and collectively thank many correspondents for their interesting and gratifying communications and reports. It was, until lately, my intention to have next demonstrated the several ready quantitative methods which these test papers provide us; and, after that, to have brought forward the qualitative and quantitative testing of sugar by reagents also on paper. But the pressing request of many of my friends urging me to produce the sugar test papers, and the importance of bringing them forward just now—the professional mind being unusually alive to receive impressions of new methods of clinical inquiry in this direction—have induced me to alter the order of the publication of the urinary matter still to be advanced. I therefore now wish to make a few remarks on qualitative sugar testing by means of test papers, and to reserve the quantitative methods for both sugar and albumen for another occasion. When looking round for a good and at the same time convenient test for sugar in the urine, I was particularly struck with a fact relating to indigo; and that was the presence of this intensely blue substance in a colourless state, when associated with glucose or some similar sugar; for instance, when in the juices of the indigo plants it is combined with indiglucin, which has a chemical formula only slightly removed from that of glucose; or when the dyer mixes indigo with glucose and dilute caustic alkali to produce a colourless solution, in which he immerses his fabrics, which acquire a blue colour on exposure to the oxygen of the air. It then appeared to me a reasonable question to ask, Can glucose in the urine be made in some way to discharge the deep blueness of indigo, and thus to tell the tale

[1] Read at the Clinical Society of London, May 11th, 1883.
[2] See THE LANCET, January 27th and February 3rd, 1883.

of its presence? Experiment gave a positive answer: for when indigo was suspended—it did not dissolve—in a weak solution of soda, or in a stronger one of carbonate of soda, a test solution was obtained, which, when heated with a few drops of diabetic urine, underwent a series of remarkable changes of colour—from blue to green, then to violet, to red, and finally to yellow. I longed to run the liquid containing carbonate of soda and indigo into filtering paper, and use it as a test paper; because, with carbonate of soda as the alkali, the test papers would have been more durable than with solution of soda. But unfortunately, after deposition on the paper, the indigo would not leave it. I then found in a work by M. Méhu a statement to the effect that when the carmine of indigo is heated with carbonate of soda, and a solution of glucose or saccharine urine, the blue colour is converted gradually into green, then into red, and finally into yellow.[3] Carmine of indigo is the sulph-indigotate of sodium, an intensely blue and soluble salt (solubility 1 in 120 parts water). Sulphuric acid when heated with indigo produces the soluble sulph-indigotic acid, which, after combining with a base (such as sodium, calcium, magnesium, &c.), provides us with insoluble indigo as a reagent in a perfectly dissolved state. When carbonate of soda is mixed with a solution of the carmine the latter is precipitated in a fine state of division; but when shaken this mixture may pass for a solution much like that of Fehling in colour and general appearance. A perfect solution of a greenish-blue tint is, however, obtained after heating the liquid. As such it may be employed as a reliable, sensitive, stable, and non-caustic test for sugar in the urine; but on several accounts I give preference to the test papers prepared from its constituents. In their manufacture it is true that great care is required to secure throughout the filtering paper a perfectly even distribution of the sulph-indigotate; but this result has now been accomplished to my satisfaction. The papers offer the following advantages over the liquid preparation:—(*a*) Every paper is charged with the same definite quantity of the reagents; a uniformity is thus provided for the qualitative testing, which, moreover, becomes a standard of known value for the quantitative estimation. (*b*) The paper filters out a fine precipitate, so that the alkaline solution of the sulph-indigotate is perfectly transparent,[4] and of a true blue; but, notwithstanding this fact, the colour of any remnant of the reagent left on the paper is completely discharged by the sugar, so that in the quantitative estimation the colourlessness of the paper will be found the guide as to the termination of the completed reaction. (*c*) The portability, cleanliness, and stability of these handy tests must commend them to your favourable attention. The characteristic reaction which indicates the presence of glucose in the urine, arises shortly after the first simmer of the solution prepared from the papers, a drop or two of diabetic urine having been added before the heating. Then a beautiful violet tint suddenly spreads throughout the bright-blue solution; very quickly the violet deepens, and passes into purple; this in its turn melts into reddish-purple, which gives place to various tints of red, and these as quickly merge into orange-red and orange, and finally the solution becomes of a straw colour, which remains without further change, though heated ever so long. At this point you will observe the paper of the same light-yellow colour as the liquid. You will note the complete range of this striking colour reaction embraces all the prismatic colours, and the order of the appearance of the successive hues is always the same. The reaction is one of great beauty; for the primary colours are not merely pure and sharply defined, but all the transitional and intermixed tints pass quickly before the eye in such rich profusion as one rarely sees in nature herself. Now, on shaking the tube the colours return in the inverse order to that in which they appeared. This remarkable thing is not due to cooling, but to admitting the oxygen of the air into the liquid; for the varying hues at any stage of the reaction may be caught and retained for days, merely by corking the tubes full of the solution, and the return of the colours, when the test-tube is at rest, always appears first at the surface, and slowly spreads downwards, so slowly that after putting aside for some hours at least the lower half of the solution will still retain its acquired colour. Experiment has shown that the tint reached in any particular observation depends on the quantity of glucose added to the test liquid—e.g., the reaction may stop at violet, purple, red, &c., and, when it thus halts, it can be easily made to proceed to the final stage by adding more of the diabetic urine, the liquid the while being kept warm. This suggests a principle on which to found a quantitative analysis. The method I propose to myself is a very simple one; it is based on the complete removal of all the colours below the pale yellow, except when the sugar exists in such small quantities as are not gaugeable by any known procedures, then the delicate scale provided by the different colours may be available.

If confirmation of the presence of sugar be further desired my series of test papers provides it. For when the mercuric chloride paper—otherwise required by one of the several methods for the quantitative determination of albumen—is dropped into the solution while still hot, after the complete development of the indigo reaction, there is produced immediately a blackish-green precipitate. No such precipitation occurs when a drop of non-saccharine urine is under examination by the indigo test, then the blue solution is merely turned into a transparent green one. Mercuric chloride, however, when added to a hot solution of mere carbonate of soda containing a drop of saccharine urine is not a test for sugar; it is only so after the full development of the indigo reaction on glucose. This final stage of the testing appears to me to clinch the presence of sugar beyond doubt.

The mode of testing is important. One of the papers should be dropped into an ordinary half-inch test tube, and as much water poured in as will just cover the upper end; a column one inch in height and half an inch in diameter will thus be produced, and the solution obtained will always acquire the same concentration. Then not more than one drop of the suspected urine is let fall into the tube from a pipette, and heat is applied. After the first change of colour it is advisable to move the tube away from the flame, and merely keep its contents hot, not boiling, in the higher part of the column of heated air above the flame; then all the colours will follow in the order I have given, without disturbance from ebullition, until straw-yellow is reached, providing the amount of glucose present is sufficient to develop all the prismatic colours, if not, another drop of urine should be added. The results of the working of this test by the side of Fehling were briefly as follow:—(*a*) On always submitting one drop of urine to the indigo test, and the presence of sugar being shown, confirmation was invariably provided by Fehling used in the ordinary way. (*b*) On the other hand, whenever one drop of urine gave no reaction with the test, Fehling's solution did not give a precipitate. (*c*) On, however, taking more than one drop of urine a different kind of experience was opened up. Then with various urines a deep violet or purple tint would strike up on the addition of the second, third, fourth, fifth, sixth, or more drops, and Fehling employed in the usual way gave negative results. But I am inclined to think in the cases in which from two to four drops developed the partial reaction, that Fehling, when applied as follows, showed such a suspicious change as to almost suggest a very minute quantity of sugar; a few drops of the urine were added to a little more than the same quantity of the solution, the true blue remaining intact, and well boiled, when, though no precipitate was visible, the blue quickly turned to a decided green tint, contrasting strongly with the pure blue of the solution held by it in another test tube. I do not assert that this change of colour from blue to green was a proof that sugar slightly over the normal was present, but to my mind it is suggestive, for I could not detect such a distinct colour reaction with urines that, guided by the indigo test, I should class as normal in respect to sugar, or whatever is the cause of the reaction in such urines.

In all these cases there was unquestionable derangement of the liver, and in some there were decided or suspicious indications of gout, especially in those forms which are sometimes grouped under the somewhat indefinite term, "suppressed gout." They were just the cases in which it is clinically interesting to detect a little more sugar than the normal. In one case now under observation sugar has been detected at odd times during the past two years by Fehling used in the ordinary way; now, however, though Fehling

[3] L'Urine, par Dr. C. Méhu. Paris, 1880.

[4] Since coming to town I find that a perfectly clear solution cannot be obtained from the papers heated in the London drinking water, while, on the other hand, in distilled water it is as transparent as when the Harrogate drinking water was used. The larger proportion of salts in the London water, especially sodium chloride, which I know impairs the solubility of the carmine of indigo, is the probable cause of the difference. The characteristic reaction of the test is, however, precisely the same.

gives no precipitate, but only the distinct green colour just referred to, the indigo test affords a very pronounced and beautiful purplish-red reaction with the second drop of the urine. So far as I can at present decide, though I feel that further experience must be appealed to, normal urine, as a rule, gives a distinct violet tint after the addition of the fifth or sixth drop. From these observations I am inclined to believe that the indigo test provides us with an accurate and very sensitive means of detecting and gauging the normal sugar, and, furthermore, those variations which probably fill in the gap between the small quantity of sugar consistent with good health and the larger amount which characterises ordinary diabetes. I therefore strongly suspect this test may open up an interesting field for clinical observation which has not been compassed by the reagents hitherto employed. May it not bring within our clinical vision some new facts in relation to sugar as a symptom of several disorders, perhaps especially those of the vaso-motor nervous system and the liver?

Observation likewise leads me to believe the indigo test possesses the following advantages over Fehling:—1. It will detect sugar in any proportion in the presence of albumen, blood, pus, or bile, and as readily as in ordinary diabetic urine. In the case of albuminous urine it is therefore unnecessary to precipitate the albumen and filter. It is well known when there is much albumen and little sugar—as in this urine—the latter may be overlooked by Fehling. 2. It gives no play of colour with uric acid, though the latter can slowly discharge the colour of the test. It is well known how this constituent in the urine breaks up Fehling. 3. Alkaline sulphides (so apt to be present in stale albuminous urine) do not, so far as I have seen, affect the indigo test applied as I have suggested. 4. The stability of the test is one of some promise, and if proved by further experience—and I know nothing to cause me to doubt it—it will be a great comfort in sugar testing. Moore's, Trommer's, and Boetger's bismuth tests are all inferior in delicacy.

The conclusions to which I am led by my observations are—(1) that the indigo test, as here presented, is a detector of glucose in the urine which possesses several points of advantage over all the old tests; (2) that it is the most sensitive of all the reagents I have tried by the side of it; and (3) that it is less liable to fallacy than the others, even though special urines—such as albuminous, purulent, and bloody ones—are not prepared for its operation by the separation of albumen, &c. As yet I have not met with anything in the urine besides glucose which brings out the characteristic play of colours. A good qualitative test should have as one of its working properties the power to easily display the coarser variations of quantity; for these are far more useful, as a rule, to practitioners than the discovery of fine gradations, which are little more than the refinements of the laboratory. This property the test before us possesses, as you will discover after putting it on its trial, and becoming acquainted with its behaviour; for, as with any new instrument, we can only discover all about it by practice. Diabetic urine for this purpose should be diluted with water—and still only one drop should be examined as before; or after the development of the complete reaction the fresh addition of a paper, or a portion of a paper may be made, when perhaps the straw-yellow will fail to appear. But each one will doubtless discover his own way to similar results. I have abstained from referring to the claims of picric acid and caustic potash, introduced by Dr. George Johnson, as compared with those of the test I here bring forward; because both—in the forms in which they are presented—are new, and their respective merits must be decided by facts and observations which can only be gathered, and trustworthily relied upon, after long and patient inquiry.

P.S.—Since reading this paper I have found that Dr. Ralfe has lately made some experiments with ordinary indigo as a test for glucose. Dr. Ralfe informs me his results were gratifying; but, desiring to use the reagent as a test paper, he found, as I had likewise done, this idea impracticable, and for the time relinquished the matter. He informed me the test, as a liquid, was used in Germany (see Neubauer and Vogel, Sydenham Society's Transactions), and about thirty years or so ago grape sugar, he believed, was employed by manufacturers to quantitatively determine samples of indigo. If so, how unwittingly one may sketch out the opposite side of the same fact, or rather may approach it from the other side; for, instead of estimating indigo by glucose, my proposition is the reverse.

FATAL CASE OF POISONING BY TERCHLORIDE OF ANTIMONY.

By R. BARRINGTON COOKE, B.A., F.L.S.,
CONSULTING SURGEON, ROYAL NORTHERN SEA-BATHING INFIRMARY, SCARBOROUGH.

A FATAL case of poisoning by butter of antimony (or "butyr," as it was formerly written) is of extremely rare occurrence; indeed, the number of cases that have occurred during this century of which any record is given may be numbered upon one's fingers. The case I am about to narrate is, I believe, unique, both from the rapidity of the action of the poison after being swallowed, and from the absence of some of the post-mortem appearances usually found as the results of a corrosive fluid of this nature.

S. H——, aged forty, the wife of a farmer in this neighbourhood, consulted me at various times during the past year, subsequently to which her husband took one of Lord Downe's farms at Ruston, and they removed to that village. The poison apparently travelled with them, as it appeared in evidence that it was purchased in Scarborough, from a well-known druggist, more than a year ago by a brother of the deceased, for the treatment of some sheep suffering from "foot-rot," a common usage of this article in the north of England. I was sent for to see the deceased on the Thursday before her death (25th January last), when her mental condition was found to be unsound. It was decided to have her removed to an asylum, and great care was enjoined upon the relatives to watch her; but notwithstanding she attempted to drown herself in the "beck" the next day (Friday). The necessary steps for obtaining a second certificate were gone through, and Dr. Lowe of Hutton Buscel was requested to see her, which he did on Sunday, about noon. He told the coroner that her physical health appeared to be good, though her mind was unsound. After Dr. Lowe's visit at noon the family, including the deceased, her husband, her sister, and the children ate a hearty dinner of roast beef, Yorkshire pudding, and potatoes, which was not concluded before 1.30 P.M. Shortly afterwards, whilst assisting her sister to wash the dishes, &c., she vomited several times at the kitchen sink, also went to the privy in the yard, from which she walked upstairs to her bedroom, where, underneath the mattress, an empty four-ounce bottle and cork were subsequently found. The medical man who had previously seen her that morning was again summoned, and on his arrival, at 2.30, found her lying on her back, unconscious, and very livid in the face and neck. She was retching, and emitting from the mouth a frothy mucous fluid, mixed with vomit (no blood) of a brown grumous colour; breathing was laboured and spasmodic; pulseless; the body cold and clammy. She expired at 3.30, *or about one hour and a half* after the first attack of vomiting. Immediately after dinner I am informed by her sister that she went into the coal cellar, and it is presumed that she there swallowed the poison, but the precise how, when, and where remains in doubt. There can be no question that it must have been taken *after* the dinner, and not before. The husband swore that the deceased had never been left for one minute from her attempt to drown herself on the Friday night till her death, and the empty four-ounce bottle, with the cork beside it, were found between the mattresses of the bed upon which the woman died, and which her sister swore she had examined. From the time of getting up in the morning at 7.30 or 8 o'clock until her death the deceased was twice upstairs in her bedroom, where the bottle was found, once after breakfast (about 10) to make the beds, and again about 11.30 to shut the windows, on both occasions accompanied by her sister. The dinner hour was about 1 P.M., before which Dr. Lowe had seen her for the first time. He was summoned again at 2.30, and saw her die in less than an hour afterwards. There was no appearance on the mattress as if any of the contents of the bottle had been spilt or run on to the mattress. The bottle was labelled "Butter of Antimony, poison," and was from Mr. Eccles, Scarborough.

Jan. 30th.—*Post-mortem examination, about forty-four hours after death.*—Rigor mortis well marked. Cadaveric lividity. No marks of external violence. The cranium, thorax, and their contents were apparently free from disease. On opening the abdomen the following appearances were

noted:—Great fulness of the vessels of liver, stomach, and omentum, especially of the vessels of the cardiac half of the stomach looking blackish through its mucous and peritoneal coats. Uterus healthy and unimpregnated, and an agglutinated appearance of the omentum to the subjacent parts; all other viscera appeared healthy. The stomach was then removed, both ends being tied, and a section was made into it in the presence of the coroner, when the whole of the inner surface of the mucous membrance and subperitoneal covering was seen to be more or less intensely congested, of a dark, almost black, colour. The stomach and its contents, together with some vomit, which had been secured on the day of death, and preserved by Dr. Lowe, were handed over to Inspector Dove for transmission to Mr. Fairley, the analyst for the North Riding. The larynx and trachea, down to its bifurcation, was examined. It contained a small portion of semi-fluid material, apparently vomit from the stomach, probably post mortem. False teeth were noted fitting to the upper jaw. *There was no corrugation of the tongue, or inner surface of the mucous membrane of the mouth, and no appearance of the action of a corrosive upon the lips, fauces, or mucous membrane of œsophagus.* The dress, which had been worn, was not then examined by us.

The following is Mr. Fairley's report:—

"I have subjected the stomach, with adherent fluid and solid matter, to careful chemical analysis. Their total weight was about ten ounces (avoirdupois). A portion of the stomach (about two ounces) contained compounds of antimony, equal to 1·68 grain of metallic antimony, and a smaller quantity of arsenic, amounting to about 0·02 grain; so that the entire stomach contained at least eight grains of antimony and 0·1 grain of arsenic. Eight grains of antimony are equivalent to nearly forty grains of tartar emetic and to nearly fifteen grains of chloride of antimony—quantities much in excess of a fatal dose for an adult person. These compounds are the most common soluble forms of antimony. Arsenic is frequently present in compounds of antimony as an impurity, but the poisonous action in this case is mainly or actively due to antimony. The contents of the stomach have also been subjected to analysis. The same poisons were present in very large quantities, which would have been more than sufficient to cause death if directly administered. There was therefore absorbed in the tissues of the stomach a quantity of antimony much in excess of a fatal dose when taken in a soluble form; and also in the contents of the stomach a quantity of antimony which had not been absorbed into the body, but which would have been amply sufficient to cause death had it been so absorbed. The symptoms and appearances, as stated to me by Inspector Dove and by Drs. Lowe and Cooke at the post-mortem, agree with those which have been noted in previous cases of poisoning by compounds of antimony."

Christison says in "Treatise on Poisons," p. 486: "It is rarely met with as the cause of poisoning, and scarcely deserves notice here were it not that its effects differ widely from those of tartar emetic and other antimonials."[1] Taylor[2] has collected three cases of poisoning with it which show that it is a powerful corrosive and irritant. In two of these cases recovery took place, the dose in one being four or five drachms taken by mistake for gingerbeer, and in the other a similar quantity was taken by mistake for antimonial wine. The third case was that of a surgeon, who took intentionally between two and three fluid ounces, and died in ten hours and a half afterwards. The whole inside of the alimentary canal was black and charred from the mouth to the jejunum, and the mucous membrane seemed to have been removed along the whole of the extent of the canal, and the submucous and peritoneal coats were so soft as to be easily torn with the fingers. Orfila mentions only one, and that an instance which occurred more than 200 years ago. Pereira, Traill, and Caspar mention none, Guy only those recorded by Taylor. On referring to "Neale's Medical Digest" (New Sydenham Society's latest edition), which covers a space of more than thirty years past, there is no mention of any case of poisoning by "butter of antimony." Woodman and Tidy recount the cases before alluded to, and some others, differing, however, from the Ruston case in material points. The nearest approach in point of time is one recorded in their analyses of cases, strange to say, by a namesake of mine, the late Mr. Weeden Cooke.

Peculiarities of the Ruston Case.—First, the rapid death from the time the poison is presumed to have been swallowed, at most *in less than two hours afterwards.* Secondly, the absence of charring or corrosion of the mouth, fauces, and œsophagus as compared with the post-mortem appearances of the mucous membrane of the stomach, which was dark and livid, almost black. The poison was probably swallowed immediately after the meal, and possibly the alimentary passage was in great measure protected from its action (on its way to the stomach) by the greasy food which had just been taken.

Butter of antimony is used for the treatment of foot-rot in sheep, and can be easily procured from any druggist or oil and colourman for that purpose. The now prevalent use of it among farmers for foot-rot may lead to more frequent cases of poisoning by this compound of antimony in the future, unless its sale be restricted or placed under more stringent police regulations. The evidence of the husband showed that he had no knowledge of its poisonous properties.

The Government have recently declared, through Mr. Mundella,[3] their intention to introduce "a Bill for the Amendment of the Sale of Poisons Act," which will include provisions respecting the sale of so-called patent medicines of a poisonous character. It is to be hoped that the attention of the Legislature will be called to the importance of placing some restrictions upon the sale of butter of antimony, which it appears is a highly corrosive and dangerous poison. I am not even aware that butter of antimony is scheduled under the list of articles deemed poisons, though tartar emetic, a far less powerful irritant, is so classed.

Dr. Pritchard (the poisoner) at one time lived at Hunmanby and Filey in this neighbourhood, and I became acquainted with him. I have been told by an agent of one of the wholesale druggists that he was in the habit of purchasing compounds of antimony (notably tartar emetic) in large quantities, for what purpose may be inferred from the diabolical use which he made of it among the members of his own family after he had removed to Glasgow. It is within the knowledge of one medical man, at least, in this locality that the treatment of his patients was very unsatisfactory, and their illnesses were generally of a protracted character. When a consultation was proposed the patient usually died; the inference being that tartar emetic was systematically employed for his vile purposes. I have sufficient evidence, apart from that by which he was convicted when on his trial for the murder of his wife and mother-in-law, to show that his unscrupulous use of compounds of antimony, through which he ultimately was brought to the gallows, need scarcely be matter of surprise.

My warmest acknowledgments are due to Dr. Wood (the coroner), to Mr. Fairley, and to Dr. Lowe, as well as to Dr. Thomas Stevenson of Guy's Hospital, for the kind assistance they have rendered me in the examination and investigation of this case.

Scarborough.

[1] Of the preparations of antimony, emetic tartar and butter of antimony are the only salts of this metal which have corrosive properties. The former when taken in overdoses is generally rejected by the stomach.

[2] Manual of Medical Jurisprudence, p. 209.

ON THE IMPROPRIETY OF THE

INVERSION OF PATIENTS IN APPARENT DEATH FROM CHLOROFORM, DROWNING, ETC.

BY HENRY R. SILVESTER, M.D., B.A. LOND.

THE LANCET of March 10th contains an interesting article by Dr. Eben. Watson, of the Glasgow Royal Infirmary, entitled "Remarks questioning the Propriety of the Inversion of Patients in the Chloroform Syncope," in which he submits on physiological grounds that this proceeding is injurious to the patient, in the first place, because it has a tendency to increase the engorgement of the right side of the heart and large vessels, a condition which is known to exist as one of the most striking effects of the employment of anæsthetic agents; secondly, that this practice is useless as a means of forcing on the general circulation, for, as everyone knows, the blood must pass through the right side of the heart and through the lungs before it can be sent to the body gene-

[3] See Hansard, Mr. Mundella, March 9th, 1883. The Bill will be introduced in the House of Lords.

rally; but since the heart is powerless to act on account of the difficulty which exists in the lungs, the further congestion occasioned by the inverted position of the body merely aggravates the existing evil; and, thirdly, that the venous blood in the neck and arms which gets to the brain, in consequence of the depression of the head, only deepens the coma which already exists. Now, there is no doubt that the treatment of drowned persons by inverting the body is very ancient. The attempt to restore from drowning by inverting the body is depicted on the Egyptian monuments. The exploits of Rameses the Great in Assyria are represented in the sculptures on the tomb of Osymandyos; some of the defeated enemy are carrying the corpse of their chief, who was drowned in the river Euphrates, and are in vain endeavouring to restore life by holding the head downwards to expel the water which was believed to have entered the body. It is probable that this kind of treatment continued down to comparatively modern times; for in the year 1774 the Royal Humane Society ordered that the body should not be carried on anyone's shoulders with the head hanging downwards, nor rolled upon the ground, nor over a barrel, nor lifted by the heels, and it is added that "these methods are injurious, and often destroy the small remains of life." Seeing, then, how injurious and apparently useless this method of treatment appears on physiological grounds, may it not have been revived with another object in view—namely, that by this means the heavy vapour of chloroform might be thus poured out from the lungs by gravitation? It is, however, very doubtful whether the vapour of chloroform, still less that of ether, at the temperature of the body, can be ejected from the lungs in this way, for some time since I performed a series of experiments in order to ascertain whether it would be possible to remove water (which is much heavier than the vapour of chloroform) from the lungs of drowned persons (supposing for the sake of argument that it had gained admission there) by placing the body in any of the positions which have been recommended for the attainment of this object. I injected small and large quantities of water into the lungs through the windpipe by a forcing syringe, and then endeavoured to remove it by placing the body in various positions, such as reclining on the face, rolled from supine to prone, held up by the feet, &c., but without success, although there was less difficulty with regard to fluids in the stomach; but this is not of much consequence, as the water swallowed is usually vomited on the return of consciousness.

In the treatment of the apparently dead the following positions of the body have had their advocates—namely, resting horizontally on the face, on the side, on the back, alternately prone and supine, inverted, sitting up, bent forwards and bent backwards. Dr. E. Watson recommends the "supine and horizontal"; but experience appears to teach that the most suitable position is that of lying on the back, the body inclining a little from the feet upwards, the shoulders and head slightly raised and supported on a firm cushion. This position is favourable for the relief of congestion of the heart and head, and both sides of the chest are free to expand, and this affords the best chance of restoration from apparent death.

Clapham Common.

ON REFRACTURE OF THE PATELLA.

BY H. PARSON, M.R.C.S., L.R.C.P. ED.,
ASSISTANT MEDICAL OFFICER, ROYAL SURREY COUNTY HOSPITAL.

PERHAPS the following particulars of a case of refracture of the patella, together with a description of the appliances used during the treatment, may be of interest to some of your readers.

In December, 1874, Mr. —— fractured his left patella at the junction of the upper and middle thirds. In October, 1880, he fractured the same bone at the junction of the middle and lower thirds; and in August, 1882, he refractured the left patella at the seat of the last injury—viz., at the junction of the middle and lower thirds. This last accident occurred August 6th whilst staying at Amsterdam. He was seen by a local surgeon who applied suitable splints, and the patient started for England on August 8th, reaching his home on the 9th. I was called in on the 11th and found considerable swelling over the joint with about three-quarters of an inch of separation between the fragments; the amount of separation which existed directly after the accident I could not ascertain. The lower fragment was small and very movable. He was wearing a leather splint with side supports to which were strapped two semilunar soft leather pads. By drawing the pads together and fastening them I got the fragments into close apposition, and the patient continued to wear this contrivance until the primary inflammation had subsided. I then devised the appliance of which an illustration is here given, and which is manufactured by Messrs.

Arnold and Sons of West Smithfield. It consists of two semilunar pieces made of some round, narrow, unyielding material, shaped to fit the edges of the lower and upper fragments. One piece slides on the other and admits of closing and separating them by means of screws and without any other movement; so that, when adjusted and firmly strapped to the side supports of a suitable splint prepared for it, the upper and lower pieces are perfectly rigid one with the other. It is then almost impossible for the patella to slip out of position. The semilunar pieces being narrow, they form grooves for themselves behind the fragments, and have a tendency to run under the bone instead of over-riding as most other appliances do; thus the pieces are kept firmly in good position in their proper plane and have no tendency to tilt. This apparatus was applied about the end of the third week from the date of the accident, and the patient removed to the couch. At the end of the fourth week he came downstairs with assistance, and went out in a Bath chair. At the fifth week he walked round the garden with the aid of sticks. At the seventh week he walked a mile with one stick. At the end of the eighth week he returned to business, walking to and fro, that is, two miles daily. He could walk well wearing the appliance, and experienced very little inconvenience, and to the best of my knowledge the fragments never slipped once during the twenty weeks that he wore the splint. The pressure was relieved at times by small tufts of cotton-wool, and by wearing an old splint at night, but during the latter part of the time nothing was worn at night, thus abrasions from continued pressure were avoided entirely.

The patient now walks well, and is not particular as to distance, but still wears a contrivance to support the knee-cap and limit the movements of the joint. The advantages claimed for the appliance are these:—

1. As soon as the primary inflammation has subsided and the apparatus firmly and properly adjusted, the patient can begin to move about, and in a short time follow his usual business pursuits.

2. The long confinement to bed is avoided; thus the patient retains his health and strength, and the condition is more favourable to the repair of tissues.

3. Easy adjustment of fragments and the keeping of them in good position, without fear of slipping when the patient is walking.

4. The slight movement of knee in walking prevents a stiff joint, and keeps up sufficient activity in the parts to complete the union.

Lastly, but not least, as far as the patient is concerned, the reduction of the "doctor's bill," as he will require much less attention.

I consider the case here mentioned to be a good test case for trying the merits of the invention; for if the surgeon can secure a good union in a refracture and under such adverse circumstances, surely the results will be far superior in the case of primary fracture.

Guildford.

AN inquest was held on the 14th inst. at Newcastle-under-Lyne touching the death of Mr. Richard Corston Wade, surgeon, formerly of Manchester. The deceased was, it appeared from the evidence, in the habit of taking laudanum. On the 12th inst. he took a larger quantity than usual and fell into a comatose condition from which he never recovered. The jury returned a verdict that "Death was caused by an overdose of laudanum."

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL LYING-IN CHARITY.

CASE OF DOUBLE CONGENITAL HYDROCELE; SUPPURATION; DEATH.

FOR the following notes we are indebted to Mr. H. Poole Berry, M.R.C.S., senior resident obstetric assistant.

B. M——, a primipara, had been in labour thirty-six hours, and had become exhausted. On the evening of March 2nd bow-forceps were applied by Mr. H. T. Sells, the junior resident obstetric assistant. She was then quickly delivered of a well-developed male child. Nothing unusual was observed in the condition of the child's scrotum. On March 10th the mother died of exhaustion, following an attack of puerperal mania. On the same day the attention of Mr. Miller (extern obstetric attendant) was drawn to the condition of the scrotum of the child, which was red and swollen. Hot fomentations were applied. On the following day, at noon, the child, then nine days old, was brought to the hospital. It was stated that it had not passed any urine since 5 A.M. on the previous day. The whole of the scrotum was much swollen, red, glistening, and somewhat tense. The possibility of extravasation of urine at once presented itself; but the fact of the inflammation being strictly confined to the scrotum, neither the penis, perineum, nor abdomen being in the least degree affected, seemed strongly to negative this view. As phimosis existed the prepuce was stretched with dressing forceps, and poultices were ordered to be applied over the pubes. Instructions were given to the nurse that the child should be brought to the hospital again in the evening if no urine had passed. At 9.30 P.M. the child was again brought, in much the same condition, but looking pinched and ill. It had been very fretful, but was now quieter. The inflammation was strictly limited as before, but was more intense in character, the whole scrotum looking more angry, giving the impression that sloughing might soon supervene. A No. 1 gum-elastic catheter was passed, and about two drachms of urine were drawn off. The child was taken home, and about ten minutes afterwards died.

A post-mortem examination was granted by the father, and was made the following afternoon (March 12th). The bladder was found to be empty, and the urethra normal. On cutting into the scrotum nothing abnormal was noticed until the serous membrane, on the left side, was incised, when pus freely escaped. In this cavity the testicle lay bare, and from it a probe passed freely into the peritoneal cavity. The peritoneal opening was distinctly perceptible to the finger, examining through an incision made through the abdominal wall, but was not sufficiently patent to admit its tip. The same condition existed on the right side. There was no diffuse peritonitis existing, though possibly some early peritonitis may have been present around the immediate neighbourhood of the rings. This was not certainly ascertained, as small an incision as possible having been purposely made into the abdominal cavity.

Remarks.—It seems possible that in somewhat analogous cases, where no post-mortem has been made, a similar condition may have existed, and that death may have been assigned to erysipelas, or to some other more or less superficial inflammation of the scrotum, the ante-mortem appearances in this case being certainly to some extent calculated to support such a view. A somewhat similar case has occurred recently at this hospital in which the inflammation being not so tricly limited, the idea of extravasation of urine was entertained, when, post mortem, a condition similar to that just described was found to exist.

SHEPPEY UNION INFIRMARY.

CASE OF ATTEMPTED SUICIDE BY CUTTING THE THROAT; ASPHYXIAL ATTACK; RECOVERY; REMARKS.

(Under the care of Mr. GEORGE BLAND.)

ON January 17th last a negro named B—— was discovered almost insensible in a garret in his house at Sheerness, with a large gash across his throat, and his wife, a white woman, in a room downstairs partly burnt, with her head and face battered about, and her windpipe, right common carotid artery, and internal jugular vein completely severed. Her son, by a former husband, stated B—— had attacked him also and inflicted several wounds, one penetrating the upper and anterior part of the left lung. He was seen by Dr. Arrol, who recommended his removal and accompanied him to the infirmary.

On admission he was in a state of extreme prostration. A large wound extended across the throat, higher and deeper on the left than on the right side. It severed the larynx, slicing off the anterior part of the cricoid cartilage and lower portion of the left side of the thyroid, penetrating backwards into the pharynx. The edges of the opening into the latter were much retracted, and would easily have permitted the passage of a good-sized plum. Hæmorrhage having ceased, stimulants and nourishment were administered by means of the stomach-pump. There was some difficulty at first in introducing the tube, for, owing to the altered position of the parts, the point of it impinged on the severed edges of the œsophagus. This was overcome by introducing the finger into the pharynx through the wound, feeling for the top of the œsophagus and so guiding the tube into it. The finger could readily be passed behind the thyroid cartilage and under the tip of the epiglottis, which could be distinctly felt flapping up and down, sometimes even it could be seen when the head was thrown well backwards and one looked up into the wound. After a couple of days the secretions increased greatly, large quantities of glairy ropy mucus and saliva giving considerable trouble. So tough was this mixture that it had to be extracted by winding it round the head of a small mop like a cable round a windlass. No air entered the mouth, breathing being carried on through the external wound. The hyoid bone, thyroid cartilage, &c., were drawn up beneath the root of the tongue, causing the wound to gape immensely.

On Jan. 19th, about ten minutes after the patient had been fed, his head fell forward and he became convulsed and gasped. Mr. Bland was standing a few yards off, and as he got to B——'s side he gave another struggle and an abortive gasp or two, a look of intense agony passing over his face, after which he collapsed and lay back apparently dead. No pulse could be detected at the wrist. As a forlorn hope, Mr. Bland threw back the man's head and passed the tip of a finger into the windpipe, pressing outwards, while with the other hand he pressed the ribs, as in artificial respiration. A very faint attempt at inspiration followed. A teaspoon being close at hand, the handle was inserted into the trachea, and the breathing began to improve, though still very slow and faint. A couple of hairpins were bent to a right angle, passed one at either side of the trachea, and used as retractors. In two or three minutes breathing was re-established. The severed cricoid cartilage had collapsed, while the divided edge of the left crico-thyroid muscle got tilted over and acted as a valve. This was subsequently snipped off.

Nothing particular occurred for some days, when Mr. Bland was hurriedly summoned to the patient. He was breathing with great difficulty, a large quantity of mucus having got into the air-passages was gurgling to the top of the trachea at each expiration and then being sucked down again. The opening was too large to favour its expulsion. The insertion of a tracheotomy tube at once had the desired effect, the constriction of the opening concentrated the expulsive force, just as a choke-bore gun barrel does, and he shot out an immense quantity of stuff through the tube, upon extracting which the trachea was found quite clear. An important point in treatment had now to be decided upon. The wound in the laryngo-pharyngeal septum was still very large, and presented no prospect of closing—that is to say, though the edges appeared to be healing a large opening would remain; in short, it would heal as a pierced ear does. For all practical purposes the larynx was destroyed, and even were it possible for it partially to unite in front, the

epiglottis as a safeguard would be next to useless, as air and mucus, and perhaps food eventually, would come down the pharynx and enter the trachea through the fistula already described. Besides this, inside the wound there was great œdema, large portions of mucous membrane being raised up and looking, and feeling to the touch, like hæmorrhoids. It was decided to retain the tube and not permit the external wound to heal, for it was felt had this been attempted, asphyxia, either instantaneous or gradual, would result before long. After about a month the man was able to swallow solid food perfectly and liquids partially. Even at this length of time it was easy to see a piece of bread pass down; it would stop for a moment at the fistula, and then suddenly disappear.

Remarks by Mr. BLAND.—This is a good example of the chief dangers in cases of cut-throat after the first shock is over. These are chiefly due to œdema and mucus trickling into the trachea, slowly asphyxiating an exhausted patient. Should difficulty of breathing arise from the former, I do not think there can be any second opinion as to propriety of performing tracheotomy; let the second be overcome, and scarcely any case need be regarded as hopeless, no matter how severe it may appear at first, provided the surgeon is prepared to give it plenty of attention. He must visit it frequently, and administer food and stimulants with the stomach-pump two or three times daily, seeing at every visit the wound is kept clean. As no two wounds are exactly alike, the detailed treatment of each must be regulated by circumstances, but I think it may be safely laid down that the old plan, not to sew up a penetrating wound, is perfectly sound, and that this plan of treatment may be carried further, especially in the early stages, and no attempt made to close the wound by keeping the head forward. The shock causes partial paralysis of the muscles of the throat, which is not recovered from for several days, and may permit the entrance of mucus into the passages. Food can only get there by neglect, as the use of the stomach-pump can always prevent this. Enemata will probably have to be frequently administered. In the above case so sluggish were the bowels that he never had a motion for over a month without one. Attention, of course, must be paid to the general treatment; but I think the chief points have been already indicated. Five weeks after the injury the external wound was somewhat larger in area than a shilling, while the opening in the laryngo-pharyngeal septum still existed. On Feb. 24th he was committed for trial, and I accompanied him to Maidstone gaol, handing him over to the charge of the prison surgeon. The tracheotomy tube was still in use, as I had not modified my opinion as to the propriety of not permitting the external wound to close. Most probably we shall hear of him again, as, in the event of his being convicted and sentenced to death, the question must arise as to the humanity of executing a man in his condition.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.

NOTES ON A CASE OF IMPACTION OF A FOREIGN BODY IN THE AIR-PASSAGES; TRACHEOTOMY; RECOVERY.

(Under the care of Dr. KEELING.)

FOR the following notes we are indebted to Mr. G. F. Gubbin, house-surgeon.

W. P——, a boy, aged three years and a half, was brought to the hospital on Dec. 11th, 1882, by his mother, who said that whilst at school another boy had attempted to make her son swallow a bead.

On admission there was considerable dyspnœa, with cough and hoarseness, but a little while afterwards a marked remission of the symptoms occurred. Dr. Keeling performed laryngo-tracheotomy, but was unable to discover any obstructing body in the larynx; the lips of the wound in the trachea were separated, and the child was sent to bed. Examination of the chest made it quite evident that there was an obstruction to the entrance of air into the left lung. On Dec. 14th (the third day after the accident) a violent attack of coughing came on, accompanied by much dyspnœa, and it was supposed that the foreign body had become dislodged; consequently a pair of dressing forceps were introduced into the wound in the trachea in order to still further dilate it, and directly afterwards an expiratory effort expelled the foreign body through the wound. Slight inflammation at the root of the left lung followed, but this soon disappeared. The wound in the trachea healed readily, and the patient was discharged from the hospital on Jan. 1st, 1883. The foreign body proved to be a pear-shaped glass pendant, with a loop of brass wire attached to it, weighing fourteen grains; it was considered to be a portion of an earring.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Sarcoma of Lower Jaw.—Sarcoma of Bladder.—Bacilli of Leprosy.—Papilloma of Bladder.—Hydatid Cyst in Lung.—Ulceration of Intestine.—Disseminated Cancer.—Gastric Ulcer.—Polypus of Stomach.—Ulceration of Larynx.—Acute Atrophy of Liver.—Vacuolation of Brain.

THE concluding ordinary meeting of the Pathological Society of London was held on Tuesday, May 15th, Dr. Buzzard, one of the vice-presidents, in the chair. By several members consenting to show their specimens as card specimens the session was closed without any arrears of work being left over.

Dr. GOODHART read the report of the Morbid Growths Committee on Mr. George Lawson's specimen of Recurrent Cartilaginous Tumour of the Lower Jaw, to the effect that the tumour was a spindle-celled sarcoma.—Dr. GOODHART also read a report on Mr. Roger Williams's specimen of Tumour in a Diverticulum of the Bladder, agreeing with Mr. Williams in stating that the tumour was a sarcoma.

Dr. THIN, for Dr. HILLIS, of Demerara, showed specimens and a drawing of the Bacilli of Leprosy. Dr. Hillis had sent from Demerara tubercles excised from patients suffering foom tubercular leprosy, and sections had been prepared and stained, at Dr. Hillis's request, especially for the Pathological Society. The drawing shown had been made from the preparations, in accordance with Dr. Hillis's wishes, and gave an accurate representation of the bacilli.

Mr. MORGAN showed a specimen of Multiple Growths in the Bladder of a Man aged sixty-five. He had had symptoms of irritation of the bladder and hæmaturia for fifteen years. While in the hospital his urine always contained blood. An exploratory incision into the bladder was made in the perineum, and a tumour was felt, together with a velvety condition of the mucous membrane at the trigone; the tumour was removed by the lithotrite, and his symptoms were relieved for six or seven weeks. Then the symptoms returned, and the man died. There was some enlargement of the prostate, and about the trigone were several small tumours, all more or less pedunculated and formed of groups of villi. They were soft to the touch. The bladder was not much hypertrophied, and the ureters only a little dilated. Mr. Morgan thought that the tumours had developed since the operation. Mr. Boyd had examined microscopic specimens, and, although the tumour was too much macerated to prepare perfect specimens, he was able to determine that the growths were papillomata.

Dr. CURNOW showed a specimen of Hydatid Cyst in the Lung, obtained from a seaman, aged thirty, who was admitted to the Seamen's Hospital for cough, hæmoptysis, and loss of flesh. In January he suddenly expectorated a great quantity of watery fluid, followed by blood. In March he spat up some membrane, recognised to be hydatid cyst-wall, and it was then discovered that he had once been a shepherd in Australia. He died from exhaustion. The upper left pleura was obliterated, and in the upper lobe of the lung was a very large cavity, occupied by a loose hydatid cyst. The base of the pleura was full of pus; the tissue of the lung was compressed and airless. Echinococci hooklets were found in the cyst. In England such cases were very rare. In Australia they have been numerous. The case was at first taken for apex phthisis and basal empyema.—Dr. BUZZARD said that Dr. Bird gave the average amount of fluid drawn from such cysts as eight to sixteen ounces, and he doubted whether such a small cyst could have been successfully tapped.—Dr. WILKS asked if Dr. Curnow associated the hydatid with the shepherd's dog.—Dr. CURNOW replied in the affirmative.

Dr. CURNOW exhibited a specimen of Ulcerated Intestine,

from a man, aged twenty-six, recently returned from Alexandria. The ship took water at Alexandria, and there were other cases of fever on board. He was admitted with enteric fever, but the stools were noticed to be very offensive. On the eighteenth day of the disease the temperature became normal; he convalesced for four or five days and sat up in bed. On the twenty-fourth day the temperature rose, and pains in the thigh and calf came on. He died on the thirty-first day. No hæmorrhage from bowels; not more than three stools in any one day. The upper part of the jejunum was thin and very transparent in places, swollen elsewhere; about its centre there was one oval ulcer, and many ulcers in the lower part and especially near the cæcal valve, where the whole surface was involved in the ulcers and surrounding swelling. Similar ulcers extended through the colon and into the rectum; some were deeply excavated, others had sloughs adherent to them; the lymphatic glands were enlarged; the spleen was very large. Thrombosis of external iliac vein. The author remarked on the great number of the ulcers, and the extent to which the large intestine was affected; the fact that the ulcers in the large intestine appeared to be older than those higher up; the absence of severe diarrhœa and the man's convalescence for four or five days, although the ulceration was going on the whole time. — Dr. HOWARD BENDALL asked if the man had bathed in the lake, which was worse than ordinary sewage to bathe in.—Dr. CURNOW could not say about the bathing; the drinking water on board ship was said to be very bad.

Dr. PERCY KIDD showed a case of Disseminated Cancer. In this case new growths were found in nearly all the abdominal organs, in the bronchial and mediastinal glands, in the lung, cerebellum, and in the subcutaneous tissue of different parts of the body. There was an old hæmorrhagic cyst in the left frontal lobe of the brain. The left arytenoid cartilage was necrosed, but no other disease was discovered in the larynx. It seemed probable that the malignant disease originated in the abdominal glands. The growths in the liver were multiple and evidently secondary. The root of the right lung was infiltrated by a very hard growth starting from the mediastinum. The bronchus going to the right upper lobe was much obstructed, and in the corresponding lobe there was some fibroid induration, and a few small, smooth-walled, pus-containing cavities, apparently the result of bronchial dilatation. On microscopical examination the growth proved to be carcinomatous, the harder portions presenting the characters of scirrhus. Sections of the right lung near the root showed a carcinomatous infiltration following the lines of the bloodvessels and bronchi, with much fibroid growth and comparatively slight implication of the lung-tissue itself. In a few sections from the head of the pancreas, which was cancerous, a curious concentric structure was observed. This stricture, which was about as large as a millet seed on section, consisted of a series of regularly disposed concentric fibrous rings, in which were numerous thin spindle-shaped nuclei, also concentrically arranged. At the centre was a minute opening, the walls of which seemed to be lined by an endothelial membrane. These appearances suggested a vascular origin.

Dr. NORMAN MOORE showed two Cases of Gastric Ulcer, associated with general Degeneration of Arteries. 1. An ulcer of oval form, about one inch in diameter, two inches from the pylorus on the lesser curvature, from a man aged fifty-six years. All the arteries of the body were highly atheromatous. The posterior third of the left cerebral hemisphere was softened, and the cerebral arteries largely calcified. The gastric artery was almost completely calcified. In the base of the ulcer was a small adherent clot leading into a branch of the pancreatico-duodenalis artery, a copious hæmorrhage from which was the cause of death. 2. A commencing ulcer in the middle of the greater curve of the stomach of a woman aged thirty-four years, who died in St. Bartholomew's of interstitial nephritis, associated with atheromatous arteries, and abundant gouty deposits in joints and other parts. The middle part of the ulcer was covered by epithelium, and consisted partly of blood and partly of necrosed mucous membrane. The ulcer was bounded by a distinct edge. Ulcer of the stomach in patients with healthy arteries had been attributed to embolus. It seemed probable from these cases that in persons with degenerate arteries gastric ulcer might be due to thrombus forming in a calcified vessel.—Dr. MOORE also exhibited a Polypus of the Stomach, a soft spherical growth from the mucous membrane projecting at the end of the first third of the great curvature. The patient was a man, aged sixty-eight, who died of bronchitis. It had given rise to no symptoms during life. There were three specimens of the kind in the museum of St. Bartholomew's; but the infrequency of the growth was shown by the fact, that the present specimen was only the second which has been observed out of the last 3000 post-mortem examinations.

Dr. NORMAN MOORE read a paper entitled Inflammation and Ulceration of the Larynx from a case of Measles and from a case of Scarlet Fever. In the case of measles the child was a boy, aged five years, who died of abscess of the brain following necrosis of the temporal bone six weeks after he was first taken ill. The larynx showed ulceration of cords and of the base of the epiglottis. There was no false membrane. In the case of scarlet fever the ulceration was somewhat more extensive. A considerable tract of epithelium was destroyed; but when fresh no false membrane could be detected. There was a deep ulceration of the fauces without false membrane. The patient was a boy, aged five years, and was the third case of well-marked scarlet fever occurring in a house in the course of three months. These cases were of interest in relation to the remark of Barthez and Rilliet, that laryngitis is more frequent in measles than in scarlet fever.

Dr. CAVAFY showed a specimen of Acute Atrophy of the Liver from a man aged twenty. When admitted to hospital he was unconscious, jaundiced, and his urine contained abundance of leucine and tyrosine. Three days before, he had come up from the country, but complained of being unwell; two days later he vomited, and was quite suddenly taken very seriously ill, he then became jaundiced and unconscious. He died the day after admission. There were numerous hæmorrhages, especially in the pleuræ, peritoneum, and pericardium. Liver weighed thirty-six ounces; the atrophy affected mainly the left lobe, the tissue was not soft, almost tough, surface smooth; on section it presented a brown-red colour, being here and there purple. Kidneys showed early fatty degeneration. Dr. Klein examined the liver and other organs. The liver and kidneys showed no bacteria; heart granular and fatty degeneration, no bacteria; the lung showed patches of hæmorrhage with very slight pneumonia, numerous bacteria were seen, long bacilli, short bacilli, and micrococci isolated or arranged in pairs to form dumb-bells. They were most numerous in the inflamed alveoli, and in the walls of vessels. Dr. Cavafy thought these bacilli were of no consequence whatever. The autopsy was made thirty-four hours after death, and the bacilli were probably associated with decomposition, appearing earliest in the organ full of atmospheric air. Waldeyer and Klebs had found bacilli in acute yellow atrophy of the liver.

Dr. HALE WHITE read a paper, written conjointly by Dr. SAVAGE and himself, on Vacuolation of the Cerebral Substance. It was shown that there were nine causes for holes in the brain—viz., 1. Small processes of the sclerosed meninges of general paralysis dipping into and excavating minute portions of cerebral tissue. 2. In the same disease the sclerosed neuroglia, by its contraction, might give rise to small cavities. 3. Multiple hydatids in the brain. These three conditions were very rare, the authors having no knowledge of the second, whilst the third was almost confined to animals suffering from staggers. Several references to Continental authors were given, and the relation of the "muslin" appearance to the second of the above was pointed out. 4. Another cause was the dilatation of cerebral vessels giving rise to the "état criblé." It was particularly emphasised that this was, in the majority of cases, of no pathological significance. 5. Shrinking of the cerebral convolutions in some cases gives rise to holes in the subjacent cerebral substance. A very good example of this condition was exhibited. 6. Miliary aneurisms would, as Charcot had pointed out, give rise to holes in the brain substance. Some very marked specimens illustrating this fact were shown. 7. The condition known in Germany as the porencephalie, in which a large gap existed in the brain substance. This might communicate either with the exterior or interior of the brain, or both. 8. The Gruyère cheese condition. This, it was pointed out, was quite different from the "état criblé," for it was due to a dilatation of the perivascular lymphatic spaces. Of the causes of this dilatation they were completely ignorant. Probably they must be local, as the dilatation was vascular. The authors showed a perfect example of this condition, in which the whole of the brain, except the lower part of the medulla, was riddled with cavities exactly like

those found in cheese, and microscopic specimens exhibited showed clearly that these holes were produced by perivascular dilatation; the shape and direction of the cavities corresponded with those of the vessels. Very few examples of this condition had been carefully described, and only one in England by Mr. Lockhart Clarke, and he referred it to the same cause. 9. The authors showed specimens from two remarkable cases, in which the kidneys, lungs, liver, heart, and brain all contained holes. In the kidney these cysts were due to the dilatation of either the tubules or Malpighian capsules; in the liver they were due to the vacuolation of the hepatic cells; in the lungs and brain it was impossible to come to any definite conclusion as to their origin, but in both these viscera the cavities contained a peculiar material, staining deeply with logwood. Both these subjects were lunatics. Cases in which there were only a few holes, such as patches of softening, hæmorrhage, &c., were not considered to come within the scope of the paper.—Dr. SAVAGE said that of the last two specimens he could say with certainty that the changes were not post mortem. The holes were evident to the naked eye at the autopsy, and the liver looked worm-eaten. The two patients were general paralytics, one a rapid case, the other a chronic one. The word porencephalie had been used for brains with a communication from the outside to the lateral ventricles, and it was a pity to have used it for another condition.—Dr. BUZZARD said that Dr. Lockhart Clarke's case was one of general paralysis also; the cavities there were filled with bloodvessels and detritus.—Dr. MAHOMED remarked that it was a common practice to preserve brains in spirits, but very rare to find a condition of marked vacuolation, which was therefore probably not dependent solely on the action of spirit.—Dr. HADDEN recently made an autopsy on a man who died from cerebral hæmorrhage, and the centrum ovale was studded with minute cysts not due to hæmorrhage.

Mr. SWINFORD EDWARDS showed a specimen of Comminuted Fracture of the Right Tibia, with nipping of the anterior tibial vessels and nerve; gangrene of the foot came on, and amputation of the leg was performed. Death occurred suddenly. The autopsy showed fatty degeneration of vessels, disease of aortic valves, and calcification of aorta. A large extravasation of blood was found at the back of the leg, pressing upon the posterior tibial artery.

Mr. VICTOR HORSLEY showed a specimen of Hypertrophy of one Condyle of the Lower Jaw, removed by Mr. Heath from a patient shown at a previous meeting. The operation had corrected the deformity. A specimen of Enlargement of the Condyle from Half of the Lower Jaw was also shown by Dr. GOODHART for Mr. EVE.

The following card specimens were shown:—Encephalocele, Uterine Disease in Animals, Remarkable Case of Parasites, by Mr. Sutton; Sarcoma of Bones of Leg, Miliary Cystic Degeneration of Mucous Membrane of Bladder, Sarcoma of Choroid, by Mr. Roger Williams; Complete Obliteration of the Coronary Artery, Cases of Aneurism of the Heart, by Dr. S. West; Necrosed Bone from External Auditory Meatus, by Mr. Roeckel; Hernia Cerebri, by Mr. Bruce Clark.

Mr. F. CHURCHILL showed as a living specimen a girl with Multiple Exostoses.

CLINICAL SOCIETY OF LONDON.

Death from Disease of Ear.—Morphœa.

THE ordinary meeting of the above Society was held on Friday, May 11th, Dr. Andrew Clark, President, in the chair. It was decided to hold an additional meeting in June to read and discuss papers already in the hands of the secretaries.

Mr. DALBY read notes of eight cases in which Suppuration within the Tympanum had ended fatally. They were selected to show how, by the consideration of a large number of cases, they might be divided into two very distinct classes. In the first class were those in which a person apparently in good health, with both tympanic membranes entire, is attacked by acute inflammation of the tympanic cavity, ending in rupture of the membrane and a discharge from the ear. Within a period to be counted by days he or she has rigors, and in due course the usual symptoms and endings of meningitis, cerebral abscess, or pyæmia. In the second class, before any serious complications arise, perforations have existed for many years, attended either continuously or at different times by a purulent discharge; and these might again be subdivided into those in which the bone forming the tympanic cavity is diseased and those in which it is not. The questions which were discussed in this paper were as follows:—1. Can it be predicted of any case in an early stage of its history that the probabilities are in favour of a fatal termination? 2. What are the local conditions of the ear, or the symptoms which would point to such a conclusion? 3. Should any especial precautions be taken? 4. Is there any treatment of a local kind that should be employed as a protecting influence? 5. Is there any treatment which is often employed in perforations that should be especially avoided? From a consideration of these cases, as well as of many others which had come under the notice of the writer, he maintained that certain conclusions might fairly be drawn from them; at any rate, that although the subject of any perforation of the membrane was in some degree of peril, those in which the bone was diseased were in greater danger than those in which it was not. It was not difficult to determine whether the bone was affected; a careful examination with the probe under reflected light, exuberant granulations and bony fetor, would decide the question. At the same time, it should be remembered that a considerable area of diseased bone in the tympanic cavity is quite compatible with long life, and this is especially the case if the patient has learned to manage the ear by scrupulous cleanliness, and by some sort of protective pad which would keep the external air from the lining membrane of the tympanum. Influences which may lead to a fatal ending are the entrance of sea water into the air, and the use of strong mineral astringents. Thus in estimating the probabilities of a long life for persons with perforations, their habitual discretion forms a distinct element as to their chances, and this might well be kept in view by insurance companies. Other points for consideration are the urgent necessity of removing a polypus if it prevent the egress of discharge from the tympanum; the important bearing of head pains, whether occurring either at the commencement of the inflammation of the middle ear, or at a later period; the importance of, in recent cases, great profusion of discharge, attended with feelings of giddiness.—Mr. HAWARD thought it well to be reminded that any patient with a discharge from the ear is in danger of a severe and even fatal illness. It was very important to know whether the surgeon can do anything to prevent these grave complications, for it seems too late to act when grave symptoms have come on. If there be a profuse discharge and dead bone, any obstruction to its outlet should be removed, and astringents appeared to be dangerous. Would it be well to perforate the mastoid bone and make another opening into the tympanum, and so syringe out the suppurating tympanum, a treatment like that employed for similar abscesses in other situations?—Mr. JESSETT asked if Mr. Dalby had made the post-mortem examinations in all the cases he had recorded. He had recently attended a girl, aged fourteen, with discharge from the ear for several years; temperature 108°; brawny swelling over mastoid process. The child died next day. Post mortem the bone was found necrosed through into the cavernous sinus, and this had set up pyæmia.—Dr. DE HAVILLAND HALL asked if it would not be better to exclude all people with discharge from the ear from life assurance; he had made up his mind not to pass such lives at his office.—Dr. R. J. LEE, some three to four years ago, saw a child about fourteen who was treated for typhoid fever. He found great tenderness of the left mastoid bone, and he had had a discharge from the ear for some months; the mastoid process was opened, but the boy died. A month ago he saw a similar case, a boy with perforation of both tympanic membranes. The discharge had ceased on the left side for a few days. The left mastoid bone was punctured next day; two days later pus flowed from the wound, and from that date the patient steadily improved. The question was, What is to be done in such cases? Were they justified in puncturing the mastoid bone at once? Under what circumstances did abscess form in the mastoid bone? In the post-mortem room they did not often find it.—Dr. MAHOMED took exception to the alarmist view of the very great danger of all persons with a discharge from the ear. Very many people so affected went on perfectly well for many years. A few months ago he had a case in Guy's Hospital with convulsions. The boy was very ill, with very high temperature and apparently meningitis. There was slight œdema over one mastoid process, and this mastoid process was trephined. Gas and pus escaped freely. The

boy did not have any further cerebral symptoms, but his temperature did not fall, and he afterwards died of pyæmia. He believed there was no meningitis in that case, but the pus had been evacuated from below the dura mater; the lateral sinus and jugular vein were plugged. He had had two similar, but less severe cases, in adults after measles. The mastoid cells were opened, pus escaped, both patients recovered. He referred to a case of a man who came to the hospital with aural vertigo; he had no perforation or sign of ear disease. Hydrobromic acid was prescribed. Three days later acute meningitis came on and he died; but there was no sign of any disease in the ear, bone, or sinuses.—Dr. ROGERS asked if the old treatment of leeching with blisters below the mastoid bone had been used by Mr. Dalby and found successful. He had seen a very large number of cases of ear disease in children, but very few deaths among them. He had known many such cases rejected for life assurance and the Civil Service, and yet be alive and well for twenty years afterwards. He had seen one or two fatal cases of such disease.—Dr. ANDREW CLARK remarked that it would be well if Mr. Dalby would give a notion of the number of the cases of ear discharge that did well. It would be well, too, to be told what advice Mr. Dalby would recommend to prevent the onset of these fatal complications in this very common affection.—Mr. DALBY did not wish to give the impression of the extreme danger of ear discharge with perforate membranes. The fatal cases he had related were very unusual, but none the less important. He had brought forward eight fatal cases from private practice in ten years, he had seen other four cases during the same time, but in these there were no post-mortem examinations, nor were they typical cases. He thought the proportion of fatal cases was about 1 to 3000. As regards life assurance he thought it would be quite ridiculous to reject all cases of ear discharge, but he would reject all cases with bone disease. Post-mortems were made in all the eight cases except one, when he, and a physician in attendance, were quite sure that the patient was dying from cerebral abscess. When the discharge was very profuse, head pains acute, and there was tenderness upon deep pressure over the mastoid process, he would advise an opening to be made into the mastoid cells. He thought there was no advantage to be obtained from leeches or counter-irritation in these cases when head symptoms had already appeared.

Mr. C. HIGGENS and Mr. G. NETTLESHIP contributed a paper on a case of Morphœa in the Region of the Fifth Nerve, with Paralysis of the Intra-ocular Branches of the Third. The subject of this case was a married woman, aged thirty-five, who applied to Mr. Nettleship in Nov. 1880, with mydriasis and partial cycloplegia of the left eye, with evidence of some dilatation of the retinal vessels and thickening of the coats of the retinal veins, and dilatation both of those vessels and the arteries. She also had single patches of ivory-white morphœa on the corresponding temple, side of the nose, and the upper lip; and a similar but less characteristic change in the skin of the forehead and front of the scalp on the same side, with thinning of the hair. The eye symptoms were of three months' duration. She had not discovered the skin changes. She was out of health from recent parturition and old uterine troubles. There was no proof of syphilis. She used eserine, and took various medicines, including iodine and arsenic, for a year, and then went to Guy's Hospital, where, under Mr. Higgen's care, she had continued the same local treatment and taken iodide of potassium and mercury. The symptoms in the left eye are unaltered, except temporarily, by the eserine drops; the healthy skin affected by the morphœa has become partially atrophic, and the hair on the affected area has nearly all fallen off. Latterly there have been threatenings of an onset of the same disease on the right side of the face and in the right eye, but it is not at present declared. During the course of the case there has been some eczema behind the ear and on the palm on the same side as the morphœa. The authors pointed out that, whilst the morphœa was strictly confined to territories supplied by the first and second divisions of the fifth nerve, the eye symptoms pointed clearly to affection of the branches of the third to the interior of the eyeball; and they observed that in this respect the case might be compared with those cases of herpes of the fifth in which the third or other motor nerves were also affected.—Mr. HIGGENS said there was a patch of morphœa over the angle of the left scapula; in all other respects she was in the same condition now as when she first came under his care.—Dr. HADDEN asked if there was any loss of sensation. He imagined there must be some diffuse spinal and cerebral change, as the disease was not limited to the face and eye, but affected the opposite scapula.—Mr. NETTLESHIP replied that there was no general loss of sensibility, save over the large patch of morphœa on the temple. Nothing suggested to his mind any central nerve disease.

The following cases were shown:—Congenital Deformity of Femur, by Mr. Morgan; Sclerema Neonatorum, by Dr. T. Barlow; Lateral Curvature of Spine, by Mr. B. Roth; Myxœdema, by Dr. Stephen Mackenzie.

MEDICAL SOCIETY OF LONDON.

Dysentery and Liver Abscess.

AT a meeting of this Society on April 30th, the President, Sir JOSEPH FAYRER, read a paper on Dysentery and Liver Abscess (see p. 855).—In the discussion which followed the reading of the paper Dr. N. CHEVERS said that recovery is probably rare in cases of pyæmic abscess of the liver, but as the peritoneum is not extensively involved the symptoms may be masked. He had found that those cases of dysentery which did not benefit by ipecacuanha always had liver disease, and recalled a case in point where the liver was full of linear cicatrices, such as would result from the healing of multiple pyæmic abscesses. His general conclusions from the treatment of a large number of cases similar to that recorded by Sir J. Fayrer were, when heavy and severe pain comes on in the right side in dysentery or malaria, to exhibit moderate doses of ipecacuanha, a purgative if necessary, large mustard poultices, and then blisters. With such measures he never saw hepatic abscess develop. If the abscess result from the absorption of septic matter, with embolism or thrombosis, how is it relieved by ipecacuanha or counter-irritation? He thought it began with congestion, and later thrombosis might occur. He referred to the case of a Bengal civilian, who was attacked by violent pain at the base of the right lung; pleurisy and pneumonia were diagnosed, and he died. On post-mortem examination a large solitary abscess was found, so old that its sac was cretaceous; ulceration took place around it and had caused the pulmonary inflammation. Another case was one of a fellow student of his at Guy's Hospital, of strumous aspect. He was attacked with agonising pain, but travelled a distance of two hundred miles; and some weeks later an abscess was evacuated through the lung. He expectorated almost pure bile. When he died only a pulmonary abscess was found.—Surgeon-General HUNTER thought it well to dissociate pyæmic abscess from tropical abscess. The former is a part of a general condition; the latter a local disease. The abscess may exist with symptoms of very minor importance. Dysentery may occur without abscess, and hepatic abscess without dysentery. Abscess of the liver in India occurs as follows:—The man has had malaria, or lived intemperately, or both. He gets out of condition, loses flesh, has "hepatic" dyspepsia; then a localised swelling over the liver is noticed, and, if contracted, it will burst in one or other direction. The abscess may be single, more often multiple. He mentioned a case of severe abscesses in a man who had never had dysentery, and had been in Egypt six months, but drinking hard. Exploratory puncture of the liver is harmless, and may give great relief. He did not like the aspirator for large superficial abscesses, but preferred a free opening with antiseptic drainage.—Dr. S. MACKENZIE supported Budd's view of the pyæmic causation of many hepatic abscesses, but in phthisis and typhoid fever abscess of the liver is very rare, so that something more than ulceration of the intestine is required. Abscess of the liver may occur from (1) venous embolism from disease of viscera opening into portal vein; (2) in connexion with disease of the hepatic area as in head injury, as pointed out by Pott; or (3) arterial embolism; (4) suppurating hydatid; (5) traumatic—very rare; (6) large abscesses without any intestinal disease. He had seen several cases of liver abscess discharge through the lung; reddish pus is often expectorated for weeks and months; very often the patient dies from the lung disease.—Dr. DREWITT said empyema was quite analogous to abscess of the liver in regard to treatment.—Dr. DYCE DUCKWORTH said that it was of great importance to regard closely the constitution and temperament of the people in whom this disease occurs. The personal element must not be left out

of the question. Dr. Ewart had said that subjects of dysentery would become tubercular in this country.—Dr. DICKSON had seen dysentery in many parts of the world, and amongst these cases had met with several of liver abscess. In China and in naval practice abscess is not common in cases of dysentery. On the coast of Africa and also on the Mediterranean abscess is rare, although malarial dysentery is common. Again, dysentery was common here 200 years ago, but he thought that abscess had not been much noted. Dr. Ward thought that liver abscess and dysentery were the result of the same cause.—Dr. SANDERSON had had experience of native troops only, and had not had many cases of liver abscess, but he had no opportunities for post-mortem examinations on sepoys. Perhaps their immunity from abscess had some relation to their eating less animal food or drinking less alcohol.—Dr. DOWSE referred to Dr. Hammond's cases of liver abscess in hypochondriasis in support of the existence of such abscess without symptoms.—Sir JOSEPH FAYRER deferred his reply to some future occasion. He then stated that the next meeting would be held in the new rooms under great advantages, and thanked the Fellows for their kindness in attending the meetings under the great difficulties entailed by the building operations. He announced that H.R.H. the Prince of Wales had signified his intention of attending the Society's conversazione.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

The Immediate Causation of Optic Neuritis in Intracranial Disease.—Recovery from Mild Sympathetic Ophthalmia.—New Registering Perimeter.—Peculiar Changes at the Yellow Spot.—New Refraction Ophthalmoscope.—Asthenopia.—Pseudo-Glioma.

THE ordinary meeting of this Society was held on the 10th inst., W. Bowman, Esq., F.R.S., President, in the chair. At the commencement of the proceedings the President reminded the members that at the next meeting, on June 7th, a debate would be opened by Dr. Gowers upon Eye Symptoms in Diseases of the Spinal Cord (*vide infra*); and that if necessary the discussion would be continued on the following evening.

A paper entitled Remarks on the Immediate Causation of Optic Neuritis in Cases of Intracranial Disease was communicated by Dr. WALTER EDMUNDS and Mr. J. B. LAWFORD. It was based on the examination of the optic nerves in eighteen cases—namely, eight of head injuries, two of tubercular meningitis, two of tumours of the dura mater at the base of the brain, two of cerebellar tumour, and two of cerebral tumour. The cases occurred consecutively at St. Thomas's Hospital. The examination of the optic nerves showed inflammation when they were affected at all, often more intense at the peripheral part and in the meninges of the nerves. The authors inferred from this that the inflammation was communicated to the nerve from its meninges, down which it extended from the meninges at the base of the brain. This view was further supported by an analysis of the cases. The alternative theory of a descending cerebritis was criticised, and considered to be less well founded. Microscopic sections and drawings were exhibited.—The PRESIDENT asked if the inflammatory changes were more marked on the outer surface of the nerve than in its interior, for, if so, the fact would support the authors' contention as to the origin of the neuritis.—Dr. EDMUNDS replied that the changes were more marked at the circumference than in the substance of the nerve.—Dr. BRAILEY said the question was one to be decided by a careful balancing of microscopical evidence, and therefore there was much to be said for the view maintained by the authors. It seemed scarcely consistent with that view that there should be so little inflammation of the disc itself; and he was inclined to attribute the swelling of the disc to œdema. In renal disease the white patches are largely due to swelling of nerve fibres from œdema. In the case of papillitis secondary to meningitis, might not the disc suffer from inflammatory œdema because of the nerve at this point being free from the pressure exerted by the sheath.

Mr. JENNINGS MILLES read notes of Five Cases of Recovery from Mild Sympathetic Ophthalmitis, the clinical characters of which were very similar. In all the cases there was a wound of the cornea, in conjunction with a wound of the ciliary region, or entanglement of the iris. The attack of sympathetic inflammation was of a very mild type, consisting of iritis serosa without any posterior synechiæ. There was very slight ciliary congestion, and no pain. In every case the sympathising eye made a rapid and uninterrupted recovery. In three cases the exciting eye was enucleated directly symptoms of sympathetic inflammation manifested themselves. In one case, excision was not performed till twelve months after all symptoms had disappeared; and in one case excision was performed twenty-two days before sympathetic inflammation appeared. This last case was also remarkable from the fact that the exciting cause of the disease was an extraction of cataract, which had been performed fifteen days previous to the excision. Mr. Milles showed some micro-photographs, illustrating the conditions of irido-cyclitis and neuro-retinitis found in the excised eyes. He stated that he was indebted to Mr. Watson Cheyne for being able to exhibit them. On the question of treatment, the cases were opposed to the dictum of Mauthner, that "one dare not excise in serous iritis;" but clearly proved that excision did no harm. On the other hand, they did not support the view that excision had any power in modifying or arresting the progress of sympathetic ophthalmitis, when once started. Stress was laid on the great importance of the constant use of atropine, and the removal of all sources of irritation, chiefly by the rigid exclusion of light, and by keeping the patient in a dark room, with a bandage over the eyes.—Mr. NETTLESHIP said that he must apologise to Mr. Snell for having mislaid a case which he had contributed on this subject, and which would have now to be read subsequently. The case was interesting, especially in connexion with the treatment employed, and he would give an outline of it. A young man received a punctured wound in the left ciliary region by a large needle. Sympathetic iritis of the right eye ensued in a few weeks. Mr. Snell prescribed atropine and rest, but after two or three days the pupil remained undilated. A small prolapse of the iris had occurred at the wound in the exciting eye, and Mr. Snell performed a sort of sclerotomy through the prolapse, removing what he could. In two days after the operation the right pupil dilated, and recovery took place.—Mr. POWER had had large experience of injuries to the eye at St. Bartholomew's Hospital, Chatham, amongst the dockyard labourers, from particles of iron becoming detached in driving in rivets. When the injury is very severe, the eyeball ruptured, the iris much damaged, the only course is to remove the globe at once. But there are many other cases in which there is merely a punctured wound, the iris protruding to a certain extent, and in which often an operation is objected to by the patient. In such a case Mr. Power is in the habit of making a large iridectomy with a keratome, clearing the iris freely away from the edges of the wound so as to avoid its being strained. He had had excellent results from this practice. Both eyes must be bandaged, and the patient left in the dark for two or three weeks after the operation. When the lens is damaged it is well to remove the eyeball. It is bad practice to simply snip off the portion of prolapsed iris.—Mr. COUPER said that in two of the cases recorded in the paper the sympathetic attack was very mild; in one extremely so; and in these we might trust to treatment. But what ground is there for believing that an attack of sympathetic inflammation will continue to be a slight one? A severe attack may supervene and destroy the eye, and treatment come too late. If we may judge from his own cases, and that of Mr. Tweedy, which the author related in the paper, it would seem as if early excision arrests the progress of sympathetic inflammation. In one of his cases this attack was so severe that traces of plastic iritis remained a year afterwards, but with normal vision. In spite of the good vision in the injured eye, he thought it was right to excise when the sympathetic inflammation showed itself.—Mr. ADAMS FROST mentioned a case under the care of Mr. Waren Tay. A girl, ten years old, was wounded in the right eye by scissors, the wound extending to the sclero-corneal junction. Seven weeks afterwards, the wound had healed, the iris adhered to it, but there was no affection of the other eye. Ten days later she complained of dimness in the left eye, and keratitis punctata was observed; fundus normal. Between the fourteenth and sixteenth weeks there was well-marked optic neuritis, but the cornea was clearer. During all this time, and until the twentieth week, atropine had been employed, but it was now left off although papillitis was still present, vision being normal. Ten weeks

later she returned with tough adhesions of the iris around the pupil, V. $\frac{2}{3}$, but no injection of conjunctiva. Atropine was used again for four weeks, and some fresh opacities appeared on the cornea. Fifteen months after the injury the cornea was nearly clear, the synechiæ unchanged; still well-marked papillitis. The injured eye remained passive throughout. The case showed the importance of long-continued use of atropine. He also reminded the Society of another case he recorded last year in which complete recovery took place. In that case there was no optic neuritis.—The PRESIDENT agreed as to the importance of obtaining at an early period absolute exclusion of light, and as to the desirability of the continued and sustained use of atropine, so long as it can be borne without increasing the congestion of the eye, as is not infrequent in advanced stages. He could never forget one case he had to deal with. A child was brought to him within a few days of the occurrence of sympathetic ophthalmia which had attained a severe height. The eye was tense and bulging, and the cornea covered with opaque dots. The injured eye was much damaged, and he excised it. Immediately after the excision the tension of the inflamed eye became normal, and after some weeks of severe iritis there was complete synechiæ, the iris being in many parts so bulged as to encroach on the anterior chamber. After months of continued exclusion of light, and the use of atropine, the eye completely recovered, and a year later there was no trace of the synechiæ, the iris being perfectly mobile. He was never more astounded or delighted at so complete a recovery. He agreed with Mr. Power as to the desirability of very early excision of the iris embracing the region of injury, and extending beyond it if possible, so as to detach all the points to which the iris might contract adhesion; and indeed, generally speaking, it is important to divide and destroy anterior synechiæ.

Mr. PRIESTLEY SMITH exhibited an improved form of the new registering Perimeter, described by him a few months ago in the *Ophthalmic Review*. In the original instrument the sight-object traversed the visual field in concentric circles. This method, though advantageous in certain cases—namely, wherever the limiting line of the field runs in a meridional direction—was not universally applicable. With the instrument as now constructed the field would be traversed either in meridians or in circles; it was thus more efficient, as well as being simpler in construction. The axis which carries the quadrant had fixed to its posterior extremity a wooden disc or hand-wheel, balanced so that the quadrant would stand in any position without fixing. The chart was placed upon the posterior surface of the hand-wheel and rotated with it. Behind the chart was a bracket carrying a horizontal fixed scale, the divisions of which correspond with the circles on the chart; and when the instrument was rotated, whatever position the quadrant assumed, the corresponding meridian of the chart stood against this scale. In consequence of this automatic movement of the chart, the readings obtained on the quadrant were very easily pricked off upon it by a steel pencil held in the hand of the operator. The advantages of the arrangement were, that the chart was visible to the operator throughout, and indicated by its own position the exact position of the quadrant. Thus any particular part of the field could be at once brought under examination by bringing that point on the chart round to the scale, and re-examination could be made of any point at any time by placing the original chart in the instrument. The perfected instrument was in the hands of Messrs. Pickard and Curry.

Mr. J. E. ADAMS showed Drawings of a peculiar appearance at the Yellow Spot. The patient was a woman. There was a small slightly raised area in each eye; the nature of this was very uncertain; very probably it was a physiological peculiarity.

Mr. COUPER exhibited an Ophthalmoscope, about a foot long, over an inch broad, and containing 140 lenses, which he found very convenient in estimating refraction. The construction of the instrument, which was very ingenious, cannot conveniently be described without a diagram.

Dr. BRAILEY made the following communications on Asthenopia:—1. The case of a delicate child, aged seven, in whom asthenopic symptoms were immediately and perfectly relieved by the use of a 4° prism, base in, divided between the two eyes. Both internal and external recti were absolutely weak, the latter apparently even more so than the former. There was no hypermetropia. 2. A case in which a prism, placed vertically, relieved symptoms of asthenopia. Correction by sphericals and cylinders gave partial relief, which was rendered complete by the addition of a prism of 3°, placed before the left eye with the apex down. The case was very like one reported to the Society by the author in 1881.

Dr. BRAILEY also read notes of a case illustrating the development of the condition known as Pseudo-glioma. The disease began with an acute febrile attack, with swelling and redness of the lid, and proptosis and injection of the globe. Afterwards the eye became slightly shrunken; the iris-periphery was retracted; and a whitish reflex was visible from behind the clear lens. Dr. Brailey judged the case to be one of spontaneous suppurative hyalitis.

Memoranda on Eye Symptoms in Spinal Disease, prepared by Dr. W. R. GOWERS.

Of the ocular symptoms associated with spinal disease, two are of especial importance on account of their frequency—atrophy of the optic nerve, and the states of the pupil. Modern pathological investigation has rendered it improbable that these ocular symptoms are the result of disease of the cord. They are associated almost exclusively with degenerative diseases, and probably depend on a degeneration which is not structurally continuous with that in the cord. They are almost unknown in acute diseases of the cord, except when these follow, or are followed by, degeneration which runs a practically independent course. Considerable interest will therefore attach to any cases that can be brought forward in which these symptoms were distinctly consecutive to an acute lesion of the cord. Optic nerve atrophy is associated especially with locomotor ataxy, and the association may be considered from the side of the ocular and of the spinal affection. In what proportion of cases of atrophy of the optic nerves can the signs of locomotor ataxy be detected? As the earliest and most constant of these signs, the loss of the knee-jerk may be conveniently taken as a criterion. In what proportion of cases of locomotor ataxy do the optic nerves undergo atrophy? It is not probable that a definite answer can be given to this question, because few cases of ataxy are followed to the end, so that the occurrence of atrophy cannot be excluded. But an approximate answer can be secured if the next question can be decided. When does atrophy of the optic nerves usually commence in the course of ataxy? The course of tabes may, for this purpose, be conveniently divided into three stages—(1) before there is any alteration in gait; (2) when the gait is distinctly ataxic, but the patient is still able to walk alone or with the aid of a stick; (3) when the patient is unable to walk without the help of another person. It is very important to know in what proportion of the cases of tabetic atrophy the change in the optic nerve commences in each of these stages. If the proportion of cases in which atrophy commences in the first stage is known, an approximate estimate of its total frequency can be formed from the number of cases in the second stage with and without signs of atrophy. Can any relation be traced, in a series of cases, between the occurrence of atrophy and the character of the spinal symptoms (pains, anæsthesia, &c.)? In what proportion of cases does tabetic atrophy affect one eye before and more than the other, and which eye is most frequently affected first? Does concentric limitation of the field always precede, or preponderate over, central amblyopia in tabetic atrophy? In rare cases there are unusual changes in the field of vision (e.g., temporal hemiopia). Observations on such cases are of especial importance, and so also are facts regarding acute failure of sight in this affection. Does the atrophy always progress to total blindness, or does it sometimes become arrested, and remain stationary for an indefinite time, as does the spinal affection? Can any instances of considerable and permanent improvement of sight in tabetic atrophy be brought forward? Observations and microscopical sections illustrating the pathological anatomy of tabetic and other allied atrophies are desirable, especially those which show the condition of the optic chiasma and optic tracts. In what respects does the optic atrophy of tabes differ from the optic atrophy sometimes associated with other forms of chronic spinal cord disease? When eye symptoms occur in general paralysis of the insane, is the case more likely to be complicated with spinal symptoms? States of pupil: The most frequent condition of the pupil associated with spinal disease is the loss of contraction to light, the pupil still contracting on accommodation (reflex iridoplegia, reflex rigidity of the pupil, Argyll-Robertson sym-

ptom). Erb has pointed out that, in these cases the pupil no longer dilates on a painful cutaneous stimulation (e.g., of the skin of the neck by a faradaic brush). Regarding this condition, information is needed on several points. Can this reflex dilatation be always obtained under normal circumstances? What is the most convenient and efficient means of obtaining it in regard to (*a*) place and (*b*) form of cutaneous stimulation? Is it true that there is always loss of reflex dilatation when there is loss of reflex contraction? The pupils are usually small in this condition, but not invariably, and are sometimes not circular. It is desirable to know whether any relation can be traced between the size and shape of the pupils and other symptoms. It is not uncommon to find, under the conditions in which reflex iridoplegia occurs, that the pupils contract under the influence of light; but immediately, the exposure continuing, dilate again to their former size, often with slight oscillations. Does this condition go on to loss of reflex contraction? In total paralysis of the internal muscles—ophthalmoplegia interna (Hutchinson)—the pupils are not usually small. What variations in the size of the pupils are met with in this condition? Regarding the association of these symptoms with spinal disease, it is desirable to know how frequently they are met with in locomotor ataxy and general paralysis of the insane, and in what other spinal diseases they occur. Both symptoms occur apart from spinal disease, and facts are needed as to the other conditions with which they are associated, and as to their relation to constitutional syphilis. Does ophthalmoplegia interna begin as reflex iridoplegia? Ophthalmoplegia externa has been shown to depend on nuclear degeneration. There is some reason to believe that reflex iridoplegia and ophthalmoplegia interna depend on a similar degeneration. Pathological observations on the nature of the lesion in these cases are much needed.

ACADEMY OF MEDICINE IN IRELAND.

A MEETING of the Surgical Section of the Academy was held on Feb. 9th, when Dr. T. E. LITTLE narrated a case of Axillary Aneurism, for the cure of which he had deligated the subclavian in its third stage. The tumour had a traumatic origin. Great difficulties surrounded the diagnosis of the case, owing to an almost complete absence of pulsation or bruit in the tumour; nor could pulsation be felt at the wrist. There was a division of opinion among the surgeons who had been asked to examine the case; but ultimately the diagnosis of aneurism was arrived at. The operation selected and performed by Dr. Little was ligature of the third stage of the subclavian, the vessel being reached by an infra-clavicular incision. The result of the operation was most satisfactory.—Dr. BENNETT dwelt on the difficulties that attended the diagnosis in this case, he being at one time of the opinion that the tumour was of venous origin. He subsequently, however, qualified this view. In deligating the first stage of the axillary artery he pointed out the advantages of keeping above, and not below, the cephalic vein.—Mr. STOKES asked the author what were his reasons for selecting the infra-clavicular operation—one which, in Mr. Stokes' experience, was much more difficult than the operation above the clavicle. He also mentioned that the probabilities of finding the artery healthy were greater when distant operation was performed.—Mr. PORTER considered the Academy indebted to Dr. Little for his excellent description of the operation. He believed the deligation of the first stage of the axillary artery was a more difficult operation than that of the third stage of the subclavian. He agreed with Dr. Bennett that the vein gave a great deal of trouble as a rule, and that the surgeon must with great caution pass either the aneurismal needle or the probe between them.—Mr. CROLY dwelt on the difficulty of the operation, mainly from the great depth of the vessel. It had been suggested, in order to facilitate reaching the vessel, to saw across the clavicle. The collapse of the aneurism after the operation was not a favourable sign. The case appeared to have many features of resemblance to that of an aneurismal varix. The occurrence of pulsation in malignant tumours he also mentioned.—Dr. LITTLE, in reply, observed that to give some colour to what Mr. Croly had said it appeared to him that the pulsation in the vein at the time was intrinsic. He gave his reasons for selecting the infra-clavicular operation, stating that the indications to keep as far as possible from the aneurism were not specially great, as the aneurism had a traumatic origin. He agreed with Mr. Croly that the collapsing of the aneurism on the application of the ligature was an unfavourable sign.

Mr. KILGARRIFF read the notes of three cases of Strangulated Hernia which had been operated on by him. The first was remarkable from the nature of the contents of the hernial tumour, consisting of the cæcum and a portion of the ascending colon in the cæcum having a free meso-cæcum and the protrusion having a complete sac. The second case was one of congenital hernia and presented many features of interest. The spermatic cord had a diameter of three-quarters of an inch, and was slung by a distinct and free mesentery. Again, the rigid, inelastic condition of the skin of the patient rendered the replacement of the testicle impossible and necessitated castration. In the third case there was a double stricture, the external consisting of thickened intercolumnar bands, and the second at the deep abdominal ring. The results obtained in these three cases were satisfactory. In the discussion which followed Mr. Ormsby, Dr. T. E. Little, Dr. Henry D. Fitzgibbon, Mr. Croly, the President, and Mr. Stokes took part. They drew attention to the after-treatment in cases of strangulated hernia, to the frequent possibility of reducing hernia after opening the sac without division of the stricture, to the possible connexion of serous effusion in the sac and extreme tightness of the stricture, and to the desirability of making a high incision in the congenital form.—Mr. KILGARRIFF replied.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

AT the meeting of this Society held on April 12th (Mr. B. Walker, President, in the chair),

Dr. PORTER showed three cases of Fractured Patella to illustrate the good results that could be obtained from very simple treatment. One case had stood the test of fifteen months, and a second of nine months, in both of which union appeared to be either osseous or very fine fibrous. The third case had only occurred about five months, and the patient was not yet able to resume work; but, as far as it was possible to judge of the result in so short a time, his leg promised to be as useful to him as the other cases shown. The same treatment had been adopted in each case—viz., back splint and foot piece, reaching well up the thigh, for three months, followed by gum-and-chalk knee-cap for two months longer. Dr. Porter dwelt particularly on the importance of firm compression at the very commencement, with a view to reduce the swelling and ensure early apposition of the fragments.

Dr. T. H. MORTON gave particulars of a case of Strangulated Umbilical Hernia successfully operated upon by him. The patient was a woman, aged sixty-four, and a reducible hernia, the size of a large orange, had existed many years. On March 7th it could not be returned by taxis, and on March 12th symptoms of strangulation appeared. Next day the operation was performed by dividing the upper edge of the ventral opening. Recovery was rapid. Dr. T. H. Morton also related a case of Hydrocele injected by Ergot. The patient, a strong man, aged twenty-nine, had first noticed a swelling eight years ago, probably induced by the saddle when riding. He had been tapped three times and an injection used once. On Feb. 24th, 1883, sixteen ounces of fluid were withdrawn by trocar, and iodine was injected. The patient came under notice again on March 25th with the fluid again collected. Eight ounces were taken away, and the treatment suggested by Mr. Walker was tried—viz., by injecting two drachms of the liq. ergotæ ext. (P.B.). Very little pain and but slight inflammatory action followed. There was no accumulation of fluid when seen on April 3rd.

Reviews and Notices of Books.

A Text Book of Pathological Anatomy and Pathogenesis. By ERNST ZIEGLER, Professor of Pathological Anatomy in the University of Tübingen. Translated and edited for English Students, by DONALD MACALISTER, M.A., M.B. Part I.: General Pathological Anatomy. London: Macmillan and Co. 1883.

THIS work is a distinct acquisition to a branch of medical science that hitherto has not been well supplied by English authors, and its appearance so soon after the publication of

an English edition of Cornil and Ranvier's Manual testifies to the need that is felt in this country for standard works on a rapidly advancing subject. Mr. Macalister deserves certainly the best thanks of our students for so promptly presenting them with this, the latest, and in some respects, the best, work on Pathology at present available. In Germany its reception has been remarkable—a second edition of the first parts of the book being called for within twelve months of their appearance, and before the remaining portions have been issued. Nor, when the work is examined, can we feel surprise at the success it has achieved. For not only does it fulfil the requirements of the day in presenting students with the results of the accumulated research of past years upon pathological subjects, but it bears throughout the stamp of a thoughtful mind and an earnest worker. Invited to undertake the preparation of a new edition of Förster's well-known text-book—a work which has run through many editions, and which was itself, we believe, largely based on the classical work of Rokitansky—Professor Ziegler found that to bring that work up to the modern standpoint would require him practically to rewrite it. He fortunately refrained from pouring new wine into an old bottle, and set himself to the task of preparing the present work, with what success we have already indicated.

At present two parts have been published, and the volume before us consists of the first of these—that which deals with general pathological anatomy. The subjects are treated in the following order—(1) Malformations, (2) anomalies in the distribution of blood and lymph, (3) retrogressive disturbances of nutrition, (4) progressive or formative disturbances of nutrition, (5) inflammation and inflammatory growths, (6) tumours, and (7) parasites, and the whole work is planned on a very definite and systematic method. There is, too, much matter introduced that is novel to similar works, showing how great have been the advances in the subject of which it treats. Thus we find included under the head of Necrosis an account of the interesting process of "coagulation necrosis," to which attention has been especially directed by Weigert and Cohnheim, and which is held to explain the formation of fibrinous false membranes; the effects on an organ of an embolic infarction, the peculiar degeneration of muscle known as Zenker's change, &c. Another section deals with the process of "colliquative necrosis," or softening. Professor Ziegler also gives prominence amongst the degenerative changes to hyaline degeneration of fibrous tissues, a change that has a superficial resemblance to amyloid degeneration without possessing its peculiar reactions. Again, in dealing with the cellular processes concerned in hypertrophy, hyperplasia, and regeneration, the author describes the remarkable structural changes undergone by cell-nuclei which were brought to light mainly by the researches of Flemming. He also devotes a short chapter to the interesting subject of metaplasia, or the conversion of one tissue into another of different type—e.g., of cartilage into mucoid or areolar tissue, or of fibrous tissue into bone.

The chapter on Inflammation deserves especial mention from the remarkably clear manner in which the author has dealt with a subject about which so many and varied views have been held. After describing the process and the varieties of inflammation, he passes to consider the later stages of the process, including repair, granulation, and cicatrisation. Under the head of the "infective granulomata," Dr. Ziegler describes in turn the neoplasia characteristic of tuberculosis, syphilis, leprosy, lupus, glanders, and actinomycosis. The subject of tuberculosis is dealt with in a way which carries conviction to the reader, and it is interesting to observe how readily the idea of a specific organised virus harmonises with the conclusions arrived at from the purely anatomical standpoint respecting this disease. When the first edition of the work was issued Koch's discovery had not been made; but in the present volume the fact of that discovery is held to give an answer to the question of the nature of the tubercular virus, and the author says, "It may therefore be accepted as an established fact that tuberculosis is an infective disease induced by the presence of a specific bacillus." Further on, he remarks, "Clinical experience would seem to indicate that the tubercle bacillus is no ordinary bacterium, such as may enter and affect any organism without distinction. It would seem rather as if infection occurred only where a definite predisposition exists, or where a considerable quantity of the virus is introduced. This predisposition may be local as well as general. The local predisposition may perhaps depend mainly on antecedent inflammatory change. A general predisposition is attributed to *scrofulous* subjects especially. These are persons whose tissues exhibit a certain frailty or susceptibility to injury that makes them particularly liable to chronic inflammatory disorders. It is, however, not at all uncommon for the term 'scrofulous' to be applied to individuals actually affected with tuberculosis, as well as those who are only predisposed to it." It might be thought that this unreserved adoption of so recent a discovery and the wide deductions that flow from it should hardly have found place in a text-book, where only facts that are well established and likely to be permanent should be quoted. But, to our mind, the very fact that so much prominence is given to it by the author is an admission of the thoroughness and exactitude shown by Koch in all his work, whilst the discovery of the bacillus has only crowned the edifice which pathologists have been slowly and painfully labouring to raise. When the history of this chapter of pathological research comes to be written, no fact will come out more clearly than this, that the anatomical study of tubercular lesions forced upon the mind the idea of a virus which by analogy from other diseases was supposed to be of bacterial nature. No one can foretell how far the knowledge gained concerning the influence of micro-organisms upon morbid processes will have led pathologists fifty years hence, or what further changes may be wrought in the pathological conception of tuberculosis. We may be sure of this, that the doctrine of its specific and infective nature, first initiated by Virchow, but widely extended and modified by his followers, will remain unshaken.

The section upon Tumours does not deal so minutely with them as the chapters in Cornil and Ranvier's work, but it is ample enough, and thoroughly represents the standpoint arrived at by modern histological research. This section concludes with a very interesting discussion of the etiology of tumours, in which Cohnheim's speculations of embryonic "residues" are justly held to be inapplicable to the explanation of many forms of new growth. The structural affinities of new growths are now fairly well known; but what is required, and what future observers will be bound to investigate, is their mode of origin and evolution. This is a difficult field, and one in which clinical rather than experimental research may furnish most material.

The concluding section on Parasites is notable for the very full account given of the bacteria. It is the first time that a text-book has ventured upon this intricate and ever-spreading department of pathology, and certainly the author has managed to survey the whole field of facts respecting pathogenic micro-organisms in a masterly manner. Teachers, as much as students, will be glad to have before them a work which contains not only so accurate an account of these micro-organisms, but such ample references to the literature of the subject.

We must not conclude this notice without calling attention to the number and excellence of the illustrations, the large majority of which are original; nor without a word of commendation to Mr. Macalister for his able rendering of the work, which is certain to be widely read in this country.

THE LANCET.

LONDON: SATURDAY, MAY 19, 1883.

No Government has been favoured with so many advantages in bringing forward a Medical Acts Amendment Bill as the present. It has the Report of the Royal Commission to justify all the provisions of the Bill in its original form, and the principal amendments which may be expected in the House of Commons. Besides this it has the great advantage of professional support. Practically, the profession is unanimous in wishing the Bill to pass, with two or three modifications, to which we shall presently allude. It is true that the profession has not held any monster meetings or presented any monster petitions. All this has been done over and over again by the profession, which feels now that the time has come for Parliament to do its part. The medical press is unanimous in demanding legislation on the lines of the original Bill. Great as these advantages are, the Government has yet another—viz., a consciousness on the part of the existing medical authorities that the days of the existing system are numbered, that half diplomas and numerous licensing authorities are parts of a dead and disparaged system. The medical authorities are wisely concurring in legislation, and expending their energies in making the best terms they can. Under all these circumstances it may be hoped with some confidence that the Bill will become law.

The important amendments which are likely to be introduced into the Bill in the House of Commons will probably have for their object: First, to give a title to the new licentiates—that of Licentiate of the Medical Council in Medicine, Surgery, and Midwifery; secondly, to give a seat on the Divisional Board to the direct representatives of the profession; thirdly, to provide that schemes of education and examination shall be drawn up by the Medical Council, and not by the Divisional Boards. Other amendments of less importance to the public and the profession will be proposed in the interest of individual bodies, such as a modification of the composition of Divisional Boards, &c. As to the title question, the Corporations were never more ill-advised than in pressing the Government to deny a title—a registrable title—to the licentiates of the new Board; this even from the point of view of their own interests. If the Bill should pass in its present form, the injustice to the new licentiate would at once be so obvious that new legislation would be called for. It is not as if the Corporations had been left out of consideration in this measure. They have been too much considered. It is probable that all the examinations of all the surviving Corporations, except the final examination, will be accepted, as at present. In the abolition of the higher title clause the suggestions of the Royal Commission have been set aside, and the new Register is to be the receptacle for sixty or seventy titles of the most various and unequal value. The Corporations will still be powerfully—in England predominantly—represented on the Divisional Boards; and now, forsooth, as the Bill stands, while made to preserve all their old titles, is made simply to deny a title to the passer of a new examination which not only supersedes theirs for State purposes, but has been necessitated by their faults. The dignified position for the Corporations would be to say: "By all means give the new licentiate a statutory title. Our examinations shall be higher than that of the new Examining Board, and our titles shall imply something more than commonplace competence. We shall reserve our titles as distinctions." Instead of this, they are making themselves parties to, nay, responsible for, an injustice to a new race of medical men, and showing themselves keen for a trade in bogus titles without significance or honour. We feel sure that the leading members of the chief Corporations have not realised the nature of this position; still less has it been realised by the Government, who are really anxious to establish an examining system on a sound basis. Mr. MUNDELLA has consented to receive a deputation of the students of London, who may be said to represent the profession of the future. They will make no unreasonable demand of him in asking for the restitution of the 26th clause of the Bill as originally framed, and we venture to believe that they will not make it in vain, and that even the Corporations will not object to escape from a position as unjust as it is undignified. We should greatly desiderate the restoration of Clause 27 of the original Bill, in accordance with a prime recommendation of the Commissioners; but at the very least a statutory title should be conceded to the new licentiates. The second amendment in importance—that for giving the direct representatives a seat on the Divisional Board—is of great moment. It is everywhere said that in medical education everything is taught but medical practice. To meet this defect and to give general effect to the principle of direct representation, now generally recognised to be just and wise, it is clearly right to give a voice on the Divisional Boards to the direct representatives of medical practitioners. Had they been on the General Medical Council, it is probable that so many practical defects in education would not have had to be complained of.

Thirdly, it would certainly be an improvement to charge the Council, and not the Divisional Board, with framing schemes for education and examination. This would give greater security for equality in each division of the kingdom than if these duties are left to Divisional Boards. At the same time we are not unmindful that, even as the Bill stands, the sanction of the Medical Council as well as of the Privy Council is necessary for medical schemes.

THE well-known author of the "Book about Doctors," Mr. J. CORDY JEAFFRESON, has recently presented to the world, in two handsome volumes, "The Real Lord BYRON." These volumes, relating to one of the strangest of our national poets, are at this moment the full talk of London Society, and will for many a long day be discussed with singular intensity of interest. But they are something more than of general interest; they have about them many special characteristics, which to the profession of medicine will be read like parts of a medical narrative. Mr. JEAFFRESON, brought up in a medical family, though himself a lawyer and man of letters, has been singularly fitted by early and scientific association for his present task.

He has grasped character and mental characteristic with a physiological understanding not always met with even in physiological essays; hence his volumes will prove to medical men not merely delightful literary reading, as they must be to the reading public generally, but useful, we had almost said clinical, and we may truly say practical studies in reference to a man who ranks as one of the most marked and original of any age or country.

The peculiar quality of Mr. JEAFFRESON'S work is that it brings the romantic poet before us in a form widely different from anything that has been yet presented to the world in relation to him; while, in respect to our own studies, it opens up an immense number of curious points of history and detail. We are informed, for instance, that BYRON'S mother, CATHERINE GORDON, was attended in her accouchement, when the poet was born, by Mr. JOHN HUNTER; so that JOHN HUNTER, like his brother WILLIAM, sometimes acted as an accoucheur—a fact which is new to us. We are told, again, that the general belief about BYRON having a club-foot is, according to the common meaning of that term, an error. He had not such a club-foot as disfigured Sir WALTER SCOTT. What he (BYRON) suffered from was contraction of the tendo Achillis of each foot, but the contraction was most marked on the right side. The right foot was smaller than the left; the contraction of its tendon was more pronounced than on the left side, and there was distortion inwards, mischiefs, which, greatly increased by the manipulations of a quack bone-setter of Nottingham named LAVENDER, would have gone from bad to worse had not the timely and sound advice of Dr. BAILLIE put a stop to the ignorant and painful procedures of the quack. As it was, the poet was always obliged to wear a boot with a high heel, fitted with a padding inside to support the heel, and by his lameness was prevented from partaking in many games and exercises in after-life which would have been most congenial to his tastes and pursuits.

In the life which the poet led we are able to trace many of the wayward and mysterious moods which have been correctly attributed to him. In the early part of his life he grew to be so fat as to be actually ugly. To remove this he resorted to the most extreme fasting, living on biscuits and soda water as an almost exclusive diet, and dosing himself profusely with Epsom salts. By these means he brought about in himself a "beauty that became proverbial," and produced, as Mr. JEAFFRESON expresses, such stimulation of the stomach that at last Epsom salts exhilarated him like wine. In 1807 BYRON, writing to his friend PIGOT, says that he had reduced himself by "violent exercise, much physic, and hot bathing, twenty-seven pounds," to which his present biographer adds that the discipline of starvation and drastic depletions quickened his brain to such a degree, that the man of intellect for the first time knew himself to be something far higher than a man of mere intellect. The goads and whips of the regimen had affected the nervous system so that he had become a man of genius. "A dose of salts," BYRON remarks in one of his journals, "has the effect of a temporary inebriation, like light champagne, upon me." Wine made him gloomy and savage as soon as the momentary exhilaration had passed, and to the last starvation and medicine operated in the same way on his mental forces. "By starving his body," remarked his friend TRELAWNY, speaking from his observation of the poet in his closing years, "BYRON kept his brain clear." Further on we read that all through his life, with the exception of two periods of excess, his rule in regard to meat and alcohol was to "live low" that he might "think high." It was not always the fact, however, that BYRON lived on physic and regimen. He had many vicious habits of living. He did not smoke tobacco, but he chewed it. He was a laudanum drinker, and during his period of deprivation at Venice he was for some months a sot in his use of spirits.

The life of BYRON has nothing in it which to the moralist is of the model order. On the contrary, it is a terrible life. From its beginning to its end it is a life of miserable selfishness and degraded ambition. Psychologically it is a study as mysterious as that of *Hamlet*; physiologically it is a study from which even practice of physic may profit; it presents a self-inflicted experiment on a human being as if to teach what an obese and degenerated body will bear in the way of depletion, and what cure might be effected in such a one by heroic measures of depletive treatment.

The last illness and death of BYRON are not less curious to the medical mind than the life of the man. In brief, BYRON went to Greece in his later days (he was only thirty-six) ostensibly to liberate Greece, actually to obtain the crown of a kingdom he hoped to see established—a crown which he did, in fact, as it would seem from these volumes, nearly secure. His death frustrated the design, and his death, preceded by epileptic seizures and by exposure to malaria, was clinched, it is generally felt, by medical perseverance in crystallised error. Two "youthful and incompetent" doctors, to quote JEAFFRESON'S definition of them, BRUNO and MILLINGEN, "did their best and their worst" for him. He had been living, by his own rule, for five weeks on toast and tea, and at last, in response to the urgent appeal and insistance of the two doctors, he consented to be bled (date, April 16th, 1824). Casting at the two the fiercest glance of vexation, and throwing out his arm, he said, in his angriest tone: "There! You are, I see, a damned set of butchers! Take away as much blood as you like, and have done with it." They took *twenty* ounces. The next day they repeated the bleeding twice, and put blisters above the knee, because he objected to have his feet exposed for the blistering process. In spite of all he lived on, and on the 18th actually rose from bed, and tottered into an adjoining room, leaning on his servant TITA'S arm. There he amused himself with a book for a few minutes, and then returned to bed. In the afternoon two new and strange doctors came to look at him, and after they had left he took one anodyne draught. Some time later he took another draught of a similar kind, and at six o'clock he uttered his last intelligible sentence—"Now I shall go to sleep." He slept for twenty-four hours, and at fifteen minutes past six on the evening of April 19th surprised his watchers by opening his eyes and instantly shutting them. "He died at that instant."

In this day we look with wonder at the medical art which in twenty-four hours could bleed three times a fasting man, then blister him, and finally supplement the so-called treatment with two strong narcotic draughts. Practice then

would be *mala praxis* now. It is thus we live to learn, and learn to forgive those who preceded us as we for our many ignorances hope to be forgiven. We regret we have not time to make further comment on Mr. JEAFFRESON'S volumes. They are replete with interest. They open up with crystal clearness the life of a past generation; and, if they do not to all minds uplift the one great mystery which hangs about the poet whose career they so graphically depict, they will always rank as belonging to the classical biographical literature of the nineteenth century.

THE dangers of excessive haste and consequent worry, of the high pressure at which many lives are now carried on, and of the diseases resulting from all this excitement, have been so often dwelt upon that in the minds of many hurry and worry have become fixed as the great characteristics of the age in which we live. The tremendous leap forward, in all departments of intellectual labour as well as applied science, which has marked recent years, has been so striking and unquestioned that attention has been diverted from another and less picturesque aspect of our social life, which may be put as the counterpoise to the more brilliant characteristic so often referred to. The dash and hurry are, after all, confined to a limited number of the citizens, and the huge majority of our people are perhaps more addicted to the demoralising tendency of mere "routine in work," an influence which has succeeded in making our artisans in many cases mere automatons, and which spreads with fatal effect even among members of professions which hold their high positions merely because independent thought is believed to be an essential in their prosecution. The best work is too often carried on by the merest minority, and, while their brilliant efforts are unsupported by the steady, conscientious, and thoughtful labour of the rank and file, the result cannot be commensurate with expectation, and may end in a general and deplorable atrophy. There is more than slight risk at present that, notwithstanding the discoveries made by pioneers in all departments of inquiry, the mass is becoming less thoughtful, less trustworthy on emergencies, and, on the whole, contented with a mechanical performance of every-day duty. The danger of this tendency, when applied to many spheres of work, is evident enough, but in perhaps no case is it of greater consequence than as referring to our own profession. No possible height to which the leaders in medicine can attain could neutralise the evil which would result from the loss of high moral and intellectual application to work on the part of the general body of practitioners. The insidious approach of any such tendency should be guarded against by every individual, and any general influence in that direction should be pointed to, and, if possible, rooted out. The man who fails to see in every case of disease brought under his ken the separate shades which distinguish it from all other cases in the same class is wanting, in direct proportion to the extent of such failure, not only in the higher duties but the highest pleasures of the profession. Routine in medicine is a blighting power which destroys many of the most promising aspirants, who hope for intellectual exercise while striving for pecuniary success; this last too often comes only over the decaying or dead body of the former. Without earnest effort no man is proof against this widespread malady; the prophylactic agents are accurate training, no undue haste for riches, and a high moral resolve. The man who means to pursue throughout life his profession nobly must begin with self-sacrifice that he may end with satisfaction.

The influences at work as hindering a higher ideal in the profession, to which we wish at present to refer, are chiefly two—the club or provident dispensary system, and the employment of unqualified assistants. Under the club system, as it has been carried on for many years in this country, many men have pursued their calling with remarkable advantage to their patients, with honour to themselves, and with considerable pecuniary success; but when the method has reached an undue development, when masters have required the help of many assistants, none but the strongest alike in body and mind could hope to do justice to their patients, themselves, and their profession. A club wrought entirely by the principal, or with the aid of one qualified assistant, and requiring a fair payment from members, is perhaps the best method of affording medical aid to workmen; but great care is needed to avoid abuse by subscribers, and haphazard treatment on the part of the practitioner. The amount of money payable by members of provident dispensaries, now springing up on all hands, is totally insufficient to ensure careful consideration for individual cases, and the influence of these, if carried on as they have begun, is certain to be prejudicial to the best interests of the workmen, and fatal to all but mere drudges in the profession who may care to deal in such drudgery. It is a physical impossibility to visit and satisfactorily consider the number of cases requiring to be seen in or from a "prosperous" dispensary; and the scamping of work is degrading in the highest degree. The poor and destitute will always remain as a burden on the profession, which has never been unwillingly borne, but when payment is possible and required, the best interests of all concerned demand that it should be sufficient.

With regard to unqualified assistants, we have only space to point to the certain development of dull and ignorant routine from their employment, and again to condemn their use in the high work open to those who pretend to alleviate or cure disease. To these men themselves the whole result is demoralisation, and we do not hesitate to say that patients are frequently subjected to wilful imposition if such persons are sent to their bedsides when "the doctor" was requested to pay a visit. It may not be openly stated that the assistant is a duly qualified practitioner, but this is not necessary to delude the ignorant public; and so long as this common blot remains within our ranks, outsiders and the Legislature itself will hesitate to believe in the sincerity of our diatribes against counter practice by chemists and other untrained pretenders. But apart from the consequences to the patients, fatal in many cases we cannot help fearing, the influence on the person who persistently pretends to undertake work for which he is unfitted must be destructive of principle, and lead to very lax views as to the value of life itself. A facility for "doctoring," fatal to all high effort, is the almost certain result of familiarity with the shell of practical work before the kernel of accurate knowledge has been tasted; and few men are afterwards able to throw aside the incubus of

routine, however excellent their chances may be. After the discussion just concluded in the General Medical Council, we may expect that this important matter will have the attention which its consequence demands; and at the present crisis in medical legislation we might even hope that the foul stain should be wiped off our escutcheon. When we hear of the continued growth of the out-patient departments at our chief hospitals, we begin to fear that the mechanical treatment of disease may reach very high places; but in the meantime a word of warning only is intended; the corollaries can be applied by each practitioner for himself.

A DECISION was given last week in the City of London Court by Mr. Commissioner KERR which is likely materially to influence the relations, as regards unwholesome houses, which exist between tenants and landlords; and in one important respect we believe the decision stands alone. A builder having sued a widow for the rent of a dwelling-house, the widow filed a counter-claim for £10 damages for breach of contract, as also for illness and loss incurred through the bad state of the drains. The defendant deposed that she had lived in the house in question for eleven years, but that she had been at last compelled to leave it on account of its unwholesome state and its faulty means of drainage; and this after three lodgers, besides her son, had quitted the house owing to the danger and nuisance to which they had been subjected. On the other hand it was contended, on behalf of the landlord, that he had done all that could be required of him under his contract, and that there was an absence of proof to show that the illness alleged to have occurred had in reality been brought about by the condition of the drains. Mr. Commissioner KERR, however, expressed his confidence in the witnesses for the defendant, and gave judgment for her on the builder's claim and also on her counter-claim for damages, adding that, had he been asked to do so, he should have given much higher damages.

Although in several cases it has been decided that under somewhat similar circumstances claims for rent could not be sustained, and defendants have been freed from the obligation of contracts into which they had entered, both as to renting furnished and unfurnished houses, yet this is, so far as we can recall, the first instance in which damages have actually been given in Court for injury done to health owing to residence in a house which was in a faulty sanitary state. But fortunately the same principle has been laid down in a higher Court, and therefore we can have no doubt but that a precedent of considerable importance has been established. The case we refer to was that of KINNAIRD *v.* SMITH, which came before Mr. Justice KAY in May, 1881. On that occasion an artist found, after he had become the tenant of a house for a term of three years, that the drains were faulty, and that the sewage escaped beneath the floor. Owing to these circumstances, he contended, illness amongst members of his family had been brought about, and considerable expenses had been incurred both in removing to another house and in other ways. Hence he claimed not only that his agreement with his landlord should be set aside, but also a sum of £275 by way of damages. Mr. Justice KAY, in summing up, gave a verdict for the tenant as regards the agreement, and only reserved the question of damages in order that inquiry might be made as to their amount; but he at the same time advised the parties to come to some arrangement.

It would thus appear that the duties which attach to the possession of house property have, in the matter of health, been distinctly recognised by the courts of law, and if it be a wrong, for which compensation can be claimed, to let an unwholesome house to a tenant, it may well be inferred that it is an equal wrong to receive people into lodging-houses and hotels under similar conditions, for the only difference appears to be in the length of the tenancy.

Annotations.

"Ne quid nimis."

THE SCOTTISH CORPORATIONS AND THE MEDICAL BILL.

THE uninfluential position, compared with that of the universities, assigned to the three Scottish corporations on the Medical Board for Scotland, is not, as might be expected, quite relished by these bodies, if we may judge by the desperate efforts which they are now understood to be making, far and near, to obtain signatures to petitions to Parliament in their favour. The Royal Commission on the Medical Acts had doubtless good reason for the recommendation which it made that the universities should preponderate in the Scottish Board. The "year of grace," or of disgrace, of the Edinburgh College of Physicians, during which it admitted a multitude to its licence without any examination whatever, has not yet passed from the memory of living men; the mode in which the Edinburgh College of Surgeons has distributed its now "bogus" Fellowship has not been without effect on the reputation of that once honourable body; nor have the Scotch corporations been able to give reason satisfactory to others why so many Irish and English candidates flock to Edinburgh, and return in a few days with the licences of the Edinburgh corporations. That two of the three Scotch corporations should have been "named" in the Report of the Royal Commission will surprise no one who reads the evidence laid before the Commission; and these corporations will do well to bear in mind that the question may be, not whether they shall have more representation, but, in the case at least of two of them, whether they shall have any at all. The licentiates of these corporations have little cause to thank the governing bodies for the criticism they have recently drawn upon the good name of their diplomas, and will no doubt think twice before lending their names to the support of a movement by those whose past action they cannot approve.

CO-EXISTENT DEFECTS OF URO-GENITARY ORGANS.

THE concurrence of two or more congenital curiosities tends to call forth a more considerable amount of conjecture and speculation than the mere presence of a single extraordinary defect. The wisdom of this tendency of the human mind may certainly be called in question, because we should have thought that one incident might, or perhaps ought to, excite as much attention as a number of odd occurrences. At all events, the co-existence of absence of one kidney with defects in the organs of generation is a sufficiently noteworthy phenomenon, and Dr Guttmann has recorded a male and female instance of this event in the April number of Virchow's *Archiv*. The first case was that of a boy aged fifteen years, who succumbed from Pott's disease of the spine. The right kidney and ureter were totally wanting, the left were much enlarged, and there was waxy degeneration of the glomeruli. The right vesicula seminalis was

absent, as well as the right vas deferens; the corresponding tissues of the left side were of small size. Both testes were present and apparently natural, though, owing to a mistake, these were thrown away, and not properly examined after the autopsy. The second instance occurred in a female aged twenty, who died from phthisis. Again the right ureter and kidney were not present, the aorta was small, and there was no right renal artery. The external organs of generation were almost entirely undeveloped, the nymphæ and clitoris hardly recognisable, and the orifice of the vagina and that tube itself very narrow. A hymen was present. The small and long uterus were apparently kinked towards the right, at the junction of the body with the neck. The left broad ligament was normal, the right was inserted at the site of the kink, so that the whole right side of the body of the uterus lay free in the pelvic cavity. This circumstance and the apparent angularity of the uterus made it probable that a two-horned womb had to be dealt with, of which the right horn was scarcely at all developed. The right and left ovaries were small; the uterine half of the right Fallopian tube terminated in a blind extremity. There are now on record in literature about seventy instances of congenital absence of one kidney. Beumer collected altogether forty-eight; in twenty-two of these there was disease of the remaining kidney, enough to cause death; in twenty-six instances, on the contrary, the present kidney was healthy, although enlarged and heavier than normal. By careful micrometric investigations the enlargement was shown to be due not only to an increase in size of the glomeruli and urinary tubules, but also to a hyperplasia of the renal tissue.

A DOCTOR'S MODEL HOUSE.

WE have to congratulate Dr. Hogg, of Bedford-park, Chiswick, on his bold but successful attempt to solve the vexed question of house-heating and ventilating. Dr. Hogg has built himself a house in the Queen Anne style for which Bedford-park is renowned, where no window can open, and where there is no fireplace, except in the kitchen. Underneath the hall, a large passage is used as the intake of fresh air. Here it can be cooled in summer by ice or water-spray, while in winter it is warmed by hot steam-pipes, which are economically heated by a small coke stove. The air then passes up into the hall, from which it is only separated by an iron trelliswork, and travels into every room of the house by apertures made in the skirtings and cornices. In the ceiling of each room there are one or two openings and exhaust shafts, leading to the foul air-chamber in the roof of the house. To produce the exhaust suction, a large shaft runs from the foul air-chamber down to the back of the kitchen fire, where the heat of the boiler and the fire suffice to attract the air. From the back of the kitchen fire, in the basement of the house, the air again travels up. A square brick shaft or chimney conveys it through the roof and into the open. In the centre of this shaft is a circular metallic flue, which carries away the smoke of the kitchen-fire, and this flue, always more or less heated, stimulates the current of air. A comparison of the minimum velocity at which the air moves forward in the extracting flues (200 feet per minute) with the cubic contents of the house, shows that the atmosphere is entirely changed throughout the dwelling once in every twenty minutes. This result is obtained imperceptibly—that is, without the slightest draught; yet ten persons smoking in one room felt no inconvenience, and next morning there was not the slightest trace or taint of tobacco odour remaining. Every part of the house being equally warm, all danger of catching cold from draughty corridors, chilly bed- or bath-rooms, is obviated. A nurse and three children sleep in one room measuring fourteen feet square by ten feet high. In an ordinary house such a room would have been rather "stuffy" in the morning, but the system of ventilation worked so well during the night, as well as during the day, that the room was quite sweet in the morning. One of the children used to suffer from defective circulation, cold fingers, chilblains, blueness of the extremities, &c., but since he has lived in the new house he has experienced no such inconvenience. Finally, as there are no fires in the rooms, as the heavier particles of dust are precipitated in the intake chamber before the air enters the house, two servants can do the entire domestic work where three were formerly necessary, and a much higher degree of cleanliness is maintained. In coals the cost has been reduced by one-third, though the entire house is now warmed instead of a few rooms. The experiment, it will be seen, has been tested in more senses than one, and has proved a success. From a domestic point of view it is economical. From a medical point of view it is hardly necessary to dwell on the advantages of a perfectly even temperature throughout the whole house, thus rendering it no longer necessary to confine a patient to one room. This temperature can be increased or lessened at will at all seasons, the air is comparatively free from dust particles, and its renewal can be ensured with mathematical precision, without incurring the risk of those sudden draughts and transitions involved by the opening of doors and windows. Mr. E. J. May is the architect who has executed this important experiment, which will, to judge from the results attained, soon find many imitators. On the other hand, such reform will also be opposed by the rooted habits of the country. There are few Englishmen who will not object to the abolition of fireplaces, and it is awkward on an emergency to find the window hermetically closed so that it is impossible to lean out and hail the friendly policeman, or watch what is passing.

THE NEW FISH MARKET.

IN a somewhat perfunctory and half-hearted way, Farringdon Market has been converted from the purposes of a fruit, flower, and vegetable market, to that of one for the sale of fish. Whether it will supersede Billingsgate will practically depend on the fact of the salesmen at the latter place being won over to perceive the advantage of the more central site. It is possible that the view taken of the matter by the retail fishmongers of the metropolis will play no inconsiderable part in determining the issue. Looked at from this standpoint it is not impossible that fortune may yet favour the new venture, as it must certainly be less trouble to fetch fish from Farringdon-street to most parts of London than to send for it to Billingsgate. At the same time it is obvious that should the more central market succeed that at the Thames side will fail, and it is by no means certain that the outcome of the change will be specially favourable to the consumer. It is more than likely to prove little else than a boon to the retail shopkeeper. What the public interests require is not so much change of place as extension; in short, something to cheapen the price of fish, and that is the very last thing in the world that either the Corporation of London or "the trade" desire. We should be glad to see a serious and spirited attempt on the part of the fish trade to extend the popularity of fish as an article of common food by lowering the sale price, trusting to an increase in the total amount sold to recoup the commercial speculators. This enterprise, however, seems almost as far off as ever, and the purveyors of meat are fully as obstructive as the purveyors of fish themselves, because it is feared that if fish came to be a staple commodity the price of meat would have to be reduced. This is doubtless a perfectly fair forecast, but is it not possible that by enriching the food of the masses generally, those who are interested in the supply of the public necessities, whether in regard to fish or flesh, might find their reward? We think this would

be so, and that the present obstruction is impolitic. However that may be, it is certain that fish *must* be placed within reach of the multitude, and the only question is when the inevitable will be faced, and senseless opposition bow to the force of facts.

EDUCATING v. EXAMINING UNIVERSITIES.

A TOO long, but not uninteresting, letter appears in the *Glasgow Herald*, signed "M.D. Glasg.," in which the writer points out, among other things, the temptation to which universities are liable to overload their curriculum in the interest of professors. The writer lauds the University of London, which boasts of testing knowledge only, no matter where it is obtained. We subjoin a comparison, in which he gives the work enjoined now as compared with that exacted twenty-one years ago:—

1862. *Curriculum of Study at Glasgow.*				1883. *Curriculum of Study at Glasgow.*			
Anatomy, one course ..	£3	3	0	Anatomy, three courses	£11	11	0
Practical Anatomy, one course	1	11	6	Chemistry, two courses..	6	6	0
Anatomical Demonstrations, one course	2	2	0	Botany two courses	5	5	0
Chemistry, one course ..	3	3	0	Physiology, two courses	6	6	0
Practical chemistry, one course	1	11	6	Zoology two courses	5	5	0
Physiology, one course ..	3	3	0	Midwifery, one course ..	3	3	0
Surgery, one course	3	3	0	Medicine, two courses ..	5	5	0
Practice of Physic, one course	3	3	0	Hospital and Clin. Med. and Surgery	21	0	0
Materia Medica, two courses (one optional)	5	5	0	Pathology, two courses	5	5	0
Medical Jurisprudence, one course	3	3	0	Surgery, two courses ..	5	5	0
Midwifery, one course ..	3	3	0	Operative Surgery	2	2	0
Botany one course	3	3	0	Materia Medica, two courses	5	5	0
Perpetual hospital ticket	10	10	0	Practical Materia Medica	3	3	0
				Medical Jurisprudence, one course	3	3	0
Thirteen classes, at a cost of	£48	4	0	Practical Jurisprudence one course	2	2	0
				Twenty-six classes, at a cost of	£90	6	0

It is admitted that all these classes are not compulsory, but that practically the professor, who is in the long run also the examiner, favours the student who has taken the greatest number of courses of lectures. We have a great respect for teaching universities as compared with mere examining machines; but, supposing this to be an accurate statement of the case, we would remind the Scotch Universities of the public opinion against over-lecturing, and of a resolution of the Medical Council, doubtless forgotten, in favour of not insisting on more than one course of lectures on the same subject. Happily, there is some hope of a Medical Council that will be able to speak with more authority than the present.

THE INDIGO TEST FOR SUGAR.

AT the last meeting of the Clinical Society Dr. Oliver showed how the well-known property of indigo carmine being converted into indigo white in the presence of certain organic matters might be rendered available for testing for sugar in urine, by means of specially prepared test-paper. The indigo test for sugar in urine has been before the profession for some years, having been originally suggested by Mulder. In the Sydenham Society's translation of Neubauer and Vogel the test is fully described. The reaction has also been long in use in operations connected with dyeing calicoes. It is based on the fact that indigotine, the colouring matter extracted from commercial indigo, with certain oxidisable organic matters, such as glucose, gallic acid, pectic acid, &c., in the presence of alkalies possesses the property of fixing hydrogen and of being converted into colourless indigo, but which is susceptible of reconversion under the influence of oxygen into indigotine. The change from indigotine into indigo white may be represented by the following equation:—Indigotine $2(C_8H_5NO) + H_2 = C_{16}H_{12}N_2O_2$, or indigo white. Many other organic as well as inorganic substances besides sugar seem to possess the property of decolourising indigo in alkaline solutions—in fact, the processes used in the different factories are extremely various. Even the processes of alkaline fermentation and butyric acid fermentation will produce the change. We do not make these remarks with a view to disparage the test, and Dr. Oliver is deserving the highest credit for his endeavour to make it readily available for clinical purposes, but to suggest a caution as to the deductions drawn from results obtained by it. It is more than probable that a test so favourably introduced by Mulder and Neubauer must have been found on more intimate acquaintance defective in its practical working, or it would not have fallen into comparative disuse. We believe, however, that while it cannot supplant the copper test, it will prove a valuable supplement. The copper test, as is well known, is not reduced by all forms of sugar, whilst the indigo reaction is given by every form of carbohydrate. It may thus be made available for distinguishing between those forms of sugar sometimes present in urine which give no reaction with copper, and may so help to distinguish these cases from true glycosuria.

A CASE OF POISONING BY CARBOLIC ACID.

A CASE has recently occurred at Calcutta which presents many points of medical interest. A practitioner of that city was charged with causing the death of his cousin, a boy of five, by administering an overdose of carbolic acid in the form of an enema. From the evidence it appears that the deceased had been suffering from diarrhœa for some days, but had not been very ill, and had been able to play about much as usual. There had been a little blood in the motions, and worms were suspected. On the afternoon of Nov. 26th the accused was called in to see the patient. The little boy was at the time in the garden, and on being sent for came running up and exclaimed, "Oh! papa has brought me a new doctor!" He was taken to his bedroom, where he was undressed and carefully examined. The doctor gave it as his opinion that there was no enlargement of the liver or spleen, but thought that the symptoms were due to worms. He asked for a bottle of carbolic acid and an enema apparatus. He then measured out an ounce of the acid; but on the father protesting that it was too much, he said, "Oh! very well; I will mix it with forty parts of water, and only inject half." On the father again protesting and saying, "Don't you think it will be too strong?" the doctor assented, and about a pint more water was added. The child was then placed on its back, and the injection commenced. After about half the fluid had been introduced, the apparatus was withdrawn, the rectum, however, being supported so that nothing should escape. The child complained of no pain, but a few minutes later was found to be insensible. The friends, in answer to their inquiries, were informed that it was only shock, and was of no consequence. An attempt to give brandy by the mouth was unsuccessful. Other medical men were then called in by the father, and artificial respiration was resorted to, but the child never recovered consciousness, and died the following morning at half past seven. No post-mortem examination was made, but it was stated that the body smelt strongly of carbolic acid. The exact quantity injected was not known, but the prisoner volunteered the statement that he used a 1 in 60 solution, and injected about 18 ounces, representing 144 grains. For the defence it was urged that it had not been conclusively shown that the fluid injected was carbolic acid. It had been obtained from a native dispensary for doctoring horses, and it might have been carbolic acid or something much stronger. Then it was urged that it was not clear that the child had died from carbolic acid poisoning at all. The parents had refused a post-mortem examination. It might have died of ulceration of the bowel or any other disease. And again, even supposing that the child had died of carbolic acid poisoning, it

did not prove that an overdose had been given. What was there to show that the child was not unusually susceptible to the action of carbolic acid, that it was not, in fact, a case of idiosyncrasy? The prisoner had studied medicine at Edinburgh and Glasgow, and at the Rotunda at Dublin, and was it to be supposed that he did not know more about the action of the drug than other gentlemen who had not had these unusual advantages? The jury ultimately found the prisoner guilty, but recommended him to mercy. The judge, in discharging him with a caution, remarked that perhaps it would be as well to give rather smaller doses in future. The accused is certainly to be congratulated on the result of the trial, but we fear that he owed his acquittal rather to the ingenuity of his counsel than to his knowledge of materia medica or therapeutics. It may interest him to note that Taylor, Murrell, Woodman and Tidy, and others consider that the fatal dose of carbolic acid is a drachm, and that recovery even in adults is very exceptional after half an ounce. At the same time it is only fair to mention that Reichert in his "Contributions to the Study of the Toxicology of the Cardiac Depressants," mentions the case of a woman, aged twenty, who recovered after the injection of 145 grains of carbolic acid for the cure of worms.

NOTIFICATION OF DISEASE IN NOTTINGHAM.

AFTER a very interesting and instructive discussion, the Town Council of Nottingham has resolved to put in force the powers relating to the notification of disease with which it is invested by the Nottingham Improvement Act. The clause had already been partially acted on, and the purport of the present resolution is to extend its application to typhoid and typhus, as well as to scarlet fever and small-pox. The discussion was interesting because it was two-sided. On the whole, we have no hesitation in saying that the advocates of a careful notification by the householder—for this is the Nottingham principle—had the best of the argument. They showed that, short of compulsory removal of the patient, a great deal of good might be accomplished, with practically no offence to anyone. In the case of small-pox, 372 patients had been removed voluntarily. Where removal was not practicable a better isolation had been secured. Upwards of 2000 persons within the sphere and risk of the disease had been revaccinated. "During the epidemic of 1871–2 the number of deaths in the borough was 349. The population in 1872 was, in round numbers, 88,000. During the recent epidemic the total number of deaths was only 57. The population in 1882 was 193,000, so that the first epidemic was more than ten times as severe as the second. As regarded scarlet fever, they had disinfected upwards of 11,000 articles of bedding and clothing, and 1465 rooms. In every case reported to them the committee had disinfected the house free of charge, unless there was a medical certificate that it had been properly disinfected. The number of cases reported was 1099; the number disinfected by Corporation servants, 601. Besides this, they had sent notice to the School Board in 551 cases, and by this means had prevented children attending school when they were peeling from scarlet fever. The committee believed they had thus very much lessened the chances of other persons contracting the disease." These seem to us splendid results of the system. The medical profession is now much more in favour of the Act than it was a year ago. Alderman Ford said, in moving the resolution, that only one complaint had been made by a medical man, which had been fully investigated. Alderman Worth said all that could be urged against the principle from a medical point of view. But it was not enough. He spoke of the friction of the working of the principle. But there is practically none. He said that an Act of general application would be better than a merely local Act, in which we agree heartily. But this does not show that a community does not do wisely in anticipating other communities. He spoke of "dodging" scarlet fever, and said that to remove a child that was exposed to this disease was not to remove its liability. This will be denied by no one. But if the child can always be kept out of the way of the poison, liability notwithstanding, it will never have it. It is surely no argument against removing a child from a house on fire, that some twelve months after the house in which the child lives may be again on fire. The same principle will serve again. Only one more objection remained—that the clause had been got into a Gas Bill surreptitiously. This was fairly disproved by Alderman Barber, who showed that the fullest notice was given in the newspapers and in the discussions in the Town Council.

SCOTCH MEMBERS AND THE BILL.

THE friends of the Scotch corporations expect great things from Scotch members in reinstating the corporations and reconstituting the Medical Board for Scotland. Scotch members may be expected to do anything that is not wrong for Scotch institutions. But it will be a strange sight to see Scotch members fighting against Scotch universities, and in favour of corporations which, unless the most trustworthy witnesses are all deceiving or deceived, have traded in titles, lowered the standard of medical examinations, and brought Scotch qualifications into serious discredit.

Dr. McVail and other correspondents seem to think that we have some special spite against the Glasgow Faculty, because we ask that Scotland should be treated as England and Ireland have been, and be relieved of one of its superfluous corporations. We have no feeling of the sort. The Faculty is not a bit worse than the two Royal Colleges, and in some respects is perhaps better. But it is in evidence that it sells its Fellowships even to those who have been refused a mere licence by other corporations. Its library will remain, even if its place on the Divisional Board be given to the representative of the practitioners of Scotland, which they well deserve, and its influence in favour of free teaching will be all the greater and purer if it is relieved of examining duties, or becomes merged in the Royal College of Surgeons of Edinburgh, to form a powerful College of Surgeons of Scotland as contemplated in the Act of 1858. This is the proper solution of the problem of reducing the number of Scotch corporations. Members for Scotland will understand that if England with 26,000,000 of people can do with two medical corporations, Scotland will not be badly off with two, *plus* her universities, which are duly honoured in the Bill.

METROPOLITAN ASYLUMS BOARD.

AT the usual meeting of this Board on Saturday last, the subject of the outbreak of typhus fever at Nazareth House was discussed. Letters were read from the Home Office and from the Mother Superior of the establishment. The former communication stated that the course to be taken by the department would depend on the nature of the report by the departmental officer, which, it was expected, would soon be in print. The managers were also informed that in times of pressure they might be expected to send ambulances to the outlying London district schools to bring to the asylums infectious cases. On the recommendation of the General Purposes Committee, and the proposal of Sir Edmund H. Currie, it was carried that the Local Government Board should be asked to give its sanction to the purchase of an additional piece of land, adjacent to the North-Eastern Asylum, at a cost of £13,175, in order that the recommendations of the Royal Commissioners might be carried out and objections on the part of inhabitants of the district obviated.

THE LIVERPOOL LOCK HOSPITAL.

AT the recent debate on the Contagious Diseases Acts in the House of Commons, Mr. Childers gave it as his reason for voting against them his opinion that the same results might be secured by voluntary means. The right honourable gentleman and those who think with him ignore the well-known fact that it was in consequence of the failure of voluntary means that the Act of 1866, which was introduced by him, was rendered necessary. And the experiment has been going on for years in places where the Acts have never been applied, with very disheartening results. Let us take as an illustration the city of Liverpool. There is in it a voluntary lock hospital, which has existed since 1834 as a department of the Liverpool Royal Infirmary. In it there are both male and female wards, the number of beds being the same for each sex—viz., twenty-five. Now it is a very significant fact that the number of admissions into the male wards has from the first, with only one exception, exceeded those in the female wards. The largest number of admissions into the latter was 291 in 1880; while exactly 100 more, or 391, were the admissions into the male wards in 1878. In other words, there has been no difficulty whatever in keeping the male wards fairly filled all the year round; but though there has been an improvement of late years, it is only with great difficulty that the small number of twenty-five beds can be kept occupied in the female wards. And this, be it remembered, is the only voluntary lock hospital in a large seaport containing 600,000 inhabitants, and a number of prostitutes estimated variably at from 2000 to 5000. Nor is this the only circumstance to be regretted. The present surgeons (Messrs. N. W. Lowndes and A. Bernard) find that the women, who are mostly prostitutes, are on their admission generally very much diseased, it being evident that they have been suffering for some time. Again, it too often happens that women, when no longer labouring under physical inconvenience, insist upon leaving, though uncured, and returning to their former mode of life. In short, this, like other hospitals of the kind, presents a series of deadlocks in consequence of its voluntary character; beds empty, not for the reason that there are no diseased women in the city, but because the latter will not come in voluntarily till they can no longer ply their calling, coming in too late and going out too soon. These facts were given in evidence by Mr. Lowndes before the Select Committee, and it was also shown that in possessing even so small a lock hospital, Liverpool was much better off than other towns and cities, lock hospitals being few and far between, and for the most part very inadequately supported.

GENERAL POLICE BILL FOR SCOTLAND.

THIS prodigiously lengthy measure has now been fairly launched in the troubled waters of the Commons, and we have the best authority for stating that the Lord Advocate has boldly declared in favour of the Bill being made compulsory. This is quite in accord with THE LANCET'S emphatic recommendation, and, though it may give rise to strong opposition, was absolutely necessary if the Act within the present generation were to be other than almost as much waste paper. Another change has, however, been made, which will raise determined opposition by the profession. It is now stated that notification will be compulsory upon the medical attendants as well as the householder. The measure, as originally drawn, left the question of notice in the hands of the practitioner, and, though it is intended that the process shall be simplified as far as possible, and the medical man is allowed to say whether urgent attention on the part of the authorities is or is not needed, we do not hesitate to affirm that under this system harmonious and effectual working cannot be anticipated with the same confidence as if the original clause had been maintained. As formerly drawn we recognised this as a model measure, so far as the vexed question under notice is concerned; and, while fully allowing that the Edinburgh method practically adopted here is an evident compromise offered to the profession, as against the clauses in Mr. Hastings' ill-advised proposal, we feel equal confidence in stating that even in Edinburgh the success of the plan has not been such as to ensure the most satisfactory results. We shall not further refer to the subject at present, but would respectfully urge that no change be made in the final draft, Clauses 323, Sect. 5, of the Bill. The whole work, comprehending over 600 clauses, is a monument of industry, while, as evidence of the most accurate knowledge of public administration, and as a whole, it has our best wishes. It is probable that the Bill will be referred to a Select Committee shortly after the holidays.

SHOULD WOMEN RIDE LIKE MEN?

SUCH is the question which is being seriously discussed in the columns of a contemporary. Perhaps it would be as well to leave the determination of the question to those whom it principally concerns. We fancy they have no wish to change the custom. As a matter of fact, although it may not appear to be the case, the seat which a woman enjoys on a side-saddle is fully as secure, and not nearly as irksome, as that which a man has to maintain, unless he simply balances himself and does not grip the sides of his horse either with the knee or the side of the leg. It is curious to note the different ways in which the legs of men who pass much time in the saddle are affected. Riding with a straight leg and a long stirrup almost invariably produces what are popularly called knocked-knees. Nearly all the mounted soldiers of the British army suffer from this deformity, as anyone who will take the trouble to notice the men of the Life Guards and Blues walking may satisfy himself. On the other hand, riding with a short stirrup produces bowed-legs. Jockeys, grooms, and most hunting men who ride very frequently are more or less bow-legged. The long stirrup rider grips his horse with the knee, while the short stirrup rider grips him with the inner side of the leg below the knee. This difference of action explains the difference of result. No deformity necessarily follows the use of the side-saddle if the precaution be taken with growing girls to change sides on alternate days, riding on the left side one day and the right on the next. The purpose of this change is to counteract the tendency to lean over to the side opposite that on which the leg is swung.

MILITIA SURGEONS.

MILITIA SURGEONS throughout the kingdom would do well to take note of the motion which Sir Eardley Wilmot has placed on the paper for June 8th—viz., to bring before the House when in Supply, the injustice done to the Militia surgeons, in depriving them of their appointments and compulsory retirement without any pension or compensation. The success of this motion, we need hardly say, will depend very much on the numbers who may be found to support Sir E. Wilmot. This is not a party question, but one simply of justice to a body of professional gentlemen who have rendered good service in their day, and are suffering gross injustice by being deprived of compensation, as well as losing their appointments, from no fault of their own, but from the exigencies and so-called improvements of the service. Militia surgeons are the only body of public servants who have been cast adrift in their old age without provision being made for them in some way. This is probably the last chance they will have of getting their claims brought under public notice. They should therefore not allow this opportunity to pass without availing themselves of every means in their power of inducing members of Parliament to support Sir E. Wilmot's motion.

CARCINO-SARCOMA OF UTERUS IN A CHILD.

THE most favourable time for the appearance of almost any disease of almost any organ is decidedly at or about the period of its greatest activity. But there are many exceptions. The pathological anatomist certainly does not expect to find disease of the generative organs in very young children, and past experience gives very good grounds for this expectation. Unquestionably, however, these organs are at times, though rarely, the site of well-marked disease in young children. Professor Rosenstein has recorded an example of alleged mixed sarcoma and carcinoma of the uterus in a child two years old. The child was taken to the doctor chiefly because it had not passed water for three days. On clinical examination a tumour of the belly was detected, which was partly due to a distended bladder. After 700 cubic centimetres of urine had been drawn off by means of a catheter, a tumour was still to be felt which reached about three fingers' breadth above the pubic symphysis. The child died after it had been under observation for fourteen days. At the post-mortem examination the uterus was found to be closely adherent to the bladder, an irregularly rounded tumour was seen projecting above the apex of the bladder, and apparently springing from the right lateral wall of the uterus, which was tilted towards the left; this nodule extended for about an inch beyond the limits of the fundus. Another nodule the size of a walnut was seen to project from the left of the fundus. The greatest length of the uterus was about two inches and a half, its thickness, from before back, about one inch and a half. Microscopical examination showed in some places, between the bundles of muscular tissue, a very fine alveolar stroma, packed with epithelioid cells of various shapes and sizes, and which contained one or more nuclei. In other parts the structure resembled that of a spindle-celled sarcoma.

DEATH FROM FRIGHT.

ON a recent occasion we commented on the physiological causes of death from fear. A curious instance of this description of casualty has just occurred. A child seven years old, the son of a sweep, and therefore not likely to have been brought up during the few years of his little life too tenderly, fell down and died from fright at seeing two older boys fighting. There is said to have been no organic disease discernible on post-mortem examination. This is remarkable, but it is, of course, possible that the impression made on the brain of this child may have been so strong as to arrest his heart's action. We confess we should like to hear more of the case in its strictly medical aspect. Meanwhile there can be no hesitation in pronouncing a strong opinion against the exposure of young children to powerfully affecting and more particularly terrifying spectacles. The practice of "frightening" children either to quiet them or simply as a diversion is inhuman in the extreme. Many cases of epilepsy have had this sort of agency for their exciting cause. It is a cruel and heartless pastime in which too many otherwise kindly intentioned persons are wont to indulge.

DANGEROUS WATER-SERVICES.

AFTER all that has been said and written as to the danger which may at any moment result from the existence of service-pipes which pass directly from the water-mains into the pans of waterclosets without the intervention of cisterns, it is disheartening to read in the report of the medical officer of health for Penrith, that in this little but charmingly located town there have, during an inquiry which is apparently still in progress, already been found as many as two hundred of these dangerous connexions, and this notwithstanding the fact that the evils and risk attendant on such a system were fully pointed out to the sanitary authority in 1876. The calamities that befell Caius College, Cambridge, and the town of Lewes, where hundreds were suddenly stricken down with enteric fever in consequence of this direct connexion, seem to have taught no lesson to this northern authority. We could wish that, in the absence of authorities sufficiently educated to appreciate the dangers of such a system, the inhabitants would themselves take the matter in hand; but their failure to do so in no way relieves the authority from the statutory obligation to effect the removal, within their jurisdiction, of a source of danger which may at any moment imperil the health of the whole community.

THE HEALTH OF THE QUEEN.

THERE would seem to be a tendency in certain quarters to exaggerate the character and immediate consequences of Her Majesty's unfortunate indisposition. There is nothing to be said except that, as so often happens, the effects of the sprain do not pass off as quickly as must be desired. At the same time there is no cause for uneasiness. Her Majesty is in her usual health, and her condition occasions no other anxiety than the desire of all around her that the progress she is making may be more rapid.

THE METROPOLITAN DISPENSARY ASSOCIATION.

CANON SPENCE, in presiding lately over the first annual meeting of the Camden Town branch of the Metropolitan Dispensary Association, expressed himself greatly gratified with the movement and its tendencies. About 1600 members, he said, had enrolled themselves. He expects that in the next year 6000 or 7000 may do so, and that the result will be sufficiently remunerative to the doctors. We shall be glad to learn more on this point, and on the classes really accommodated on such easy terms by the Association.

THE DALRYMPLE INEBRIATE HOME.

A MEETING at the Mansion House, to support the cause of buying and conducting a Home for Inebriates, to be called the Dalrymple Home, is summoned for the 31st of May. The Lord Mayor will preside. The committee has chosen The Cedars, Rickmansworth, for this purpose. The cause is an excellent one, and £5000 are required to complete the purchase and furnish the Home. But we confess to feeling that until the law for dealing with habitual drunkards is strengthened, little can be expected from such a movement.

HOSPITAL ACCOMMODATION FOR THE NORTH OF LONDON.

THE Secretary of the Metropolitan Free Hospital writes to the papers to say that the committee of the hospital has secured a site for rebuilding in the Kingsland-road, abutting on De Beauvoir-square. With a freehold bought and paid for, and a sum in hand sufficient to form a nucleus for a building fund, the committee consider themselves justified in commencing to build.

CONVICTION FOR FALSE CERTIFICATION.

MR. ARTHUR WALTER BROUGHTON of Batley has been convicted and fined £5 by the magistrates of Batley for signing the death certificate of a case which, in the opinion of the magistrates, he had not attended, but which had been attended by his unqualified brother. In cross-examination this gentleman admitted that he advised Mr. Broughton to see the patient, "as she was near her end." The certificate was a blank one, signed by the defendant, and filled in by

his unqualified representative. In this branch of practice it is evident that the chief end of qualification is not "to obviate the tendency to death," but to see the patient with a view to the death certificate.

HEALTH LECTURES FOR THE PEOPLE.

THE Manchester and Salford Sanitary Association is engaged in a useful work—namely, the popularising of knowledge in relation to matters of personal health and domestic hygiene. The Rev. J. W. Reynolds, rector of St. Marks, Cheetham Hill, has contributed to the series a particularly well conceived and useful lecture on "Thrift: its bearing on Health and Disease," which we can confidently recommend to the attention of our readers. The reverend gentleman's views are sound, and they are clearly and forcibly put. In the brief compass of some sixteen pages he has succeeded in compressing quite a comprehensive view of the whole question, embracing food, clothing, the home, and medical aid.

AT the monthly meeting of the Cambridge Improvement Board on the 8th inst., a memorial signed by 709 inhabitants of the borough in protest against the building of a hospital for the reception of infectious diseases on the site determined upon was presented. The reasons alleged were: (1) The dense population of the district in which the site was situated; (2) the publicity of the site; (3) the low level and bad drainage arrangements of the locality; and (4) that, owing to a railway crossing in the neighbourhood of the proposed hospital, patients would be detained *en route*. The determination of the Board was, however, adhered to.

A NEW HOSPITAL for infectious diseases has just been formally opened for the borough of South Shields. The buildings consist of an administrative block of two pairs of wards in detached pavilions, and of laundry, disinfecting stove, &c. They are built in the Gothic style of architecture, of red brick with stone dressings, and they stand on two acres of land. Such hospital provision has long been wanted, and it has now been obtained in a state of efficiency which leaves nothing to be desired.

THE Alumni Association of the Jefferson Medical College of Philadelphia has decided to found a Professorship of Pathological Anatomy in the College in honour of Professor S. D. Gross. This is a very fitting tribute to this distinguished surgeon and teacher, since in his earlier years he wrote a book on Pathological Anatomy which was long used as the text-book on the subject in American schools.

AS was to be expected, the authorities of several of the towns in which the Contagious Diseases Acts have been in force—e.g., Chatham, Devonport, Plymouth—have entered a protest against the discontinuance of the operation of the compulsory clauses of the Acts, which they affirm have been of signal benefit alike to the inhabitants of the towns and to the unfortunate women themselves.

THE medical staff and officers of the Three Counties Lunatic Asylum, Beds, on the 11th instant presented Mr. Rogers with a costly clock and ornaments *en suite*, on his leaving the asylum as senior assistant medical officer, to occupy the post of medical superintendent of the Cambridge County Asylum, to which he has lately been appointed.

THE Governor of Texas, U.S.A., has, in a message to the Legislature, advised that vaccination be made compulsory in the State.

A MEMORIAL has been forwarded to the President of the Local Government Board by the Manchester and Salford Sanitary Association on the subject of inspection of bakehouses. The memorialists approve of Mr. Redgrave's propositions that such inspection should be in the hands of the local authorities rather than in those of the factory and workshops' inspectors, and that bakehouses should be licensed and subjected to strict control by the same authorities.

AT the second hearing on Wednesday, at Hammersmith Police-court, of the case of Mary Ann Goss, the midwife charged with communicating puerperal fever to a woman whom she attended, Mr. Sheil expressed surprise that the police should have been left to conduct a case of the kind without legal assistance. The prisoner was again remanded on bail.

THE Presbyterian Eye, Ear, and Throat Charity Hospital, of Baltimore, whose new building was recently dedicated, is (says the New York *Medical Record*) supported in a somewhat novel way. Each of the Presbyterian churches in the city in succession takes charge of the hospital for a month, paying all expenses. When a congregation is too small to bear the expense, two are united.

THE death has recently occurred at Newbury of Mr. Robinson, M.R.C.S., who had entered upon his ninety-first year. Mr. Robinson began his career as an army surgeon, and was present on duty at the battle of Waterloo. His connexion with Newbury was of long duration, and for some years he was a member of the Newbury Corporation.

AN Act passed by the Ohio Legislature on March 15th, 1883, providing for the systematic sanitary inspection of schools, deserves notice as being the first law ever passed by any State in the Union providing for such inspection. It is to be hoped that other States will speedily follow the example set by Ohio.

IT is officially announced that the reward for distinguished and meritorious service, which became vacant recently through the death of Surgeon J. Wyer, has been conferred on Sir Thomas Galbraith Logan, K.C.B., honorary physician to the Queen, and formerly director of the Army Medical Department.

THE Queen, through her Secretary, has expressed her gratification at the satisfactory progress made by the Museum of Hygiene established in London in memory of the late Professor Parkes.

THE *Athenæum* announces that the whole of Mr. W. G. Black's "Folk Medicine," written for the Folk-Lore Society, is nearly ready for publication. The contents promise to be of considerable interest.

NINETY-SIX candidates—the largest number on record—have entered for the First Professional Examination for the Fellowship of the Royal College of Surgeons. The examinations commence to-day (Friday).

DR. JOHN S. BILLINGS has been elected a member of the National Academy of Sciences, Washington, U.S.A.

THE Sharpey Physiological Scholarship will shortly become vacant by the resignation of Mr. F. Gotch.

THE 10th of June this year is fixed for the Hospital Sunday collections in the metropolis.

HOSPITAL ADMINISTRATION.

No. IV.

LUNATIC ASYLUMS.

IT is most desirable that the profession and the public should regard asylums for the insane in their true light as hospitals for the cure of mental diseases. It is quite true that a special hospital for the treatment of diseases of the mind must differ in many essential particulars from one adapted to the relief of bodily infirmities. It should be differently situated, differently planned, and differently administered. In the one case patients are forcibly detained, in the other they are voluntary boarders, but in both cases the reason of their being in hospital is the same; they are there to receive skilled and constant medical treatment, that their disease may be cured if that be possible, but if not that their condition may at least be alleviated. Let it be admitted then that lunatic asylums are hospitals in the truest sense of the word, and that the subject of hospital administration cannot be fully discussed without including that of asylum management. The special circumstances and requirements of asylums must always prevent their being administered upon precisely the same lines as general hospitals, but there is little doubt that they would gain much by being assimilated to them in some particulars. The vast *matériel* for clinical and pathological research which exists in our large asylums is at present very inadequately utilised for scientific purposes. In saying this we do not cast any reproach upon the medical officers of these institutions; in proportion to their numbers, there are among them probably quite as many authors and investigators as in other walks of professional life. Under the present system, however, the number of medical men attached to our asylums barely suffices for the proper carrying on of necessary work, leaving little spare time or energy for the pursuit of original research. How this difficulty can best be met is a matter worthy of the most careful consideration. It is to our medical schools that we chiefly look for work of this kind; in them are to be found numbers of young men zealous in the attainment of medical knowledge, and able, either by themselves or under the guidance of others, to work out the details of various medical problems. Lunatic asylums can never become the centres of medical schools, but there is no reason why some of them should not become more directly attached to medical schools, with mutual advantage to both establishments. The asylum would profit by the clinical work done in it by senior students, and also by obtaining the services of specialists in the departments of surgery, ophthalmology, gynæcology, &c., and the school would secure a greatly extended field for the prosecution of study and research. Such a system would also tend to produce asylum medical officers imbued with the love of clinical work for its own sake, and ready in their turn to assume the *rôle* of teachers in their special department. Those who are experienced in asylum management know that the difficulties in the way of such an arrangement as that now sketched out are many and great; but it is not proposed to discuss them here. Suffice it to say that great credit will be due to the asylum physician who is the first thoroughly to overcome them and to show by success that they are not insurmountable.

COMMITTEES OF MANAGEMENT.

These consist in county and borough asylums (State institutions) of from twelve to thirty visiting justices, who are appointed by the magistrates in Quarter Sessions. They hold periodical meetings, usually monthly or fortnightly, but occasionally weekly. The meetings are mostly held at the asylum. Reports are received from the asylum officials, the various departments of the institution are inspected from time to time, financial and other business is transacted, bye-laws are framed, and various rules made for observance by the officers and other *employés*. Among the duties imposed by law upon the visiting magistrates is the ordering of the discharge of patients recommended for that purpose by the medical officer, and the granting leave of absence "on trial" to others under similar circumstances. Asylum committees take very varying views as to the extent of their duties; in the more rural counties the tendency is to meet with less frequency, and to leave the general management very greatly to the resident medical superintendent. In more populous counties, where the magistracy is more largely composed of men of business habits, the practice is to retain the general management more in the hands of the committee; the chairman thus tends to become a non-resident lay superintendent. It is usual to form a house committee and a finance committee from among the more active members of the general committee. Sometimes other sub-committees are formed to supervise the farm, wages and salaries, &c. In the "registered lunatic hospitals," which either are or partake of the nature of charitable institutions, the boards of management and committees are constituted very similarly to those of general hospitals, of which we spoke at some length on a previous occasion.

THE MEDICAL SUPERINTENDENT.

The position occupied by the medical superintendent in our large public asylums is a matter which presents many interesting points for discussion; it is somewhat analogous to the question as to how far the medical staff should be represented in the governing body of general hospitals. The medical superintendent is regarded as the chief executive officer in all asylums. His responsibilities in connexion with the institution are far greater than those of a physician to a hospital; for he is not only responsible for the proper medical care and treatment of all the patients, but is also charged, in a greater or less degree, with the general administration. In most of our county asylums he is absolutely responsible to the committee of visiting justices for the working of every department; but in some others, notably those in or near London, the committeee give greater responsibility to the other officers (steward, engineer, matron, &c.) in the management of their respective departments. The administrative duties of the medical superintendent are then chiefly confined to the supervision of the attendants and nursing staff. It is well known that the successful treatment of physical disease depends greatly upon the hygienic and other conditions by which the patient is surrounded, and that unless these be favourable good results cannot be expected to follow the most skilful use of drugs and diet. These considerations have even greater weight in the treatment of insanity. There is no doubt that the medical treatment of mental disease depends far more for its success upon the conditions of the patient's every-day life—upon his occupations, amusements, associates, &c.—than upon the exhibition of therapeutic remedies, though these latter must by no means be neglected.

RELATIONS OF MEDICAL SUPERINTENDENT TO ASSISTANT MEDICAL OFFICER.

This last consideration naturally raises the question of the division of professional work between the medical superintendent and the assistant medical officers; it is one which has never been adequately discussed, and the practice varies very greatly in different asylums. In some cases the medicinal and dietetic treatment is left entirely to the assistant medical officers, who are always fully qualified, registered practitioners, and consequently legally responsible for all measures they may adopt. In other cases the medical assistant acts purely as a house-physician, all medicines prescribed by him having to be expressly sanctioned by the

medical superintendent before being administered. To both of these systems there are obvious objections, and yet a middle course is very difficult of execution in practice. When two medical men are treating the same patient they must see and examine him together, or at least hold a consultation, otherwise neither can know the opinions and grounds upon which the other bases his treatment. The difficulties of holding the requisite number of consultations in an institution where there are perhaps 500 patients under the care of two medical officers are practically insuperable. We believe that in no large asylum is it the practice for the superintendent and the medical assistant to make their daily visits to the wards together; this would be employing two men to perform work which might be done certainly more quickly and probably quite as efficiently by one. It would also retain the assistant constantly in the position of a house-physician, and under these conditions few men would care to hold the office for more than a year. It is manifestly for the advantage of asylums that the post of assistant medical officer should be a permanent one. It is from among the experienced men who have held this post for a varying number of years that medical superintendents are elected as vacancies occur. A great amount of independent action must fall to the lot of the assistant medical officer; if the superintendent had no other calls upon his time he might devote all his energies to purely medical work, and he would then seldom require an assistant; but this is not the case, he must always play an active part in the general administration and arrangements of the asylum, must conduct an extensive correspondence, and must be free to devote much time and attention to various questions of organisation and management. The arrangement sometimes adopted by which he formally sanctions his assistant's prescriptions for patients whom he has not medically examined with a special view to ascertaining the suitability of the treatment proposed, merely signifies the formal acceptance of responsibility for skilled work which has been done by another with whom the real responsibility still remains, and who is, moreover, recognised by the State as an independent and responsible agent in all medical matters. The best system is that which allows separate action to the assistant in medical treatment, especially that of physical disease, it being understood that he acts in general accordance with the views of the superintendent, whom he should be ever ready to consult, and whose attention he should always direct to any material change in the condition of any patient. The medical superintendent should, as the name of his office implies, exercise a general supervision over the medical treatment, keeping himself well informed by personal observation as to the condition of the patients, supplementing his assistant's treatment in any way he may think advisable, and suggesting to the latter any alterations he may desire. We believe this to be the usual mode of working adopted in our large asylums, though there is in many a tendency for the superintendent to ignore his medical functions altogether. Another arrangement which works well in some asylums is that by which the morning visit to particular wards is paid alternately by the superintendent and the assistant. Thus the work on any given day is divided, but each officer takes part in the treatment of all the patients. It is necessary to the smooth working of this plan that the most cordial relations and mutual confidence should prevail between the two medical men concerned; neither must feel hurt if one sees reason to alter the treatment which the other has adopted on a previous occasion, but neither must hesitate so to alter it if the change appears desirable for the patient's benefit. Where a difference of opinion exists, as must often occur, consultation should take place, the action ultimately decided upon depending of course upon the senior officer. As in all medical consultations, it is of the first importance that both parties should act solely with a view to benefit the patient. The relations subsisting between the medical superintendent and the assistant medical officer in an asylum are essentially different from those of principal and assistant in private practice; in the latter case each usually has his own cases to treat independently; it is only occasionally that joint action is called for, and the principal then takes charge of the case. In asylum practice all cases are really under joint treatment, and the assistant is usually more experienced and of higher professional standing than in private practice.

ASSISTANT MEDICAL OFFICERS.

It is greatly to be desired that such accommodation should be provided in our county asylums as would allow of assistant medical officers being married men. This is at present quite the exception; the result is that many good men, after having had several years' experience in asylum work, give it up solely on account of the enforced celibacy which it almost invariably entails. If this reform were adopted, and better salaries paid, many men would be content to hold the position permanently and to devote their lives to the purely medical work connected with the study and treatment of insanity. This office should be known as that of resident physician, and all purely medical matters should be left entirely in the hands of its holder. We feel convinced that under these conditions many would prefer to hold the office permanently rather than assume the harassing administrative duties of superintendent, which interfere to so great an extent with professional work. It would still be necessary, for reasons which have been given above, that a medical man should hold the appointment of superintendent or director; he would devote his energies to administrative matters and would always be ready to facilitate arrangements for carrying out the views of the experienced resident physicians. In small asylums, where the administrative duties are comparatively light, the present system of appointing one resident medical superintendent and an assistant medical officer satisfies the requirements of the case, but where there are more than 500 patients the superintendent should be quite free from the necessity of performing routine medical work, and this should be provided for by the appointment of one or more resident physicians. These latter should have had previous experience as resident clinical assistants. Such a system as this would combine well with affiliation of asylums to medical schools.

TRAINING OF ASYLUM ATTENDANTS.

No system exists at present for the special training of nurses or attendants for asylum work. Most of those who are engaged as such have not previously had experience in nursing of any kind. They first become acquainted with their duties after having commenced to perform them; in this they are assisted by the older nurses and the superior officers; they are also provided with a book of rules and instructions. The system works fairly well, because beginners are not placed in responsible positions, but act as assistants to those who are more experienced. Still there is undoubtedly room here for improvement. The wages paid to nurses and attendants in many county asylums are too low to offer the necessary inducement to the most desirable class of candidates. Trained nurses can always command a better salary in general hospitals; but even they would require further special training or experience before being fitted for the duties of an asylum attendant. Supposing that a special system were instituted for training male and female attendants on the insane, it would still be necessary that the inducements held out at the end of the period of training should be much greater than at present; otherwise suitable candidates would certainly not be forthcoming in anything like sufficient numbers. We believe that something of this kind will be done before long. It is not many years since the regular training of all hospital nurses was instituted, but the system

has already become general. A similar result would inevitably follow the commencement of a well-advised scheme for the training of nurses in asylums. Until such a system is established, it is of the greatest importance to pay good wages to attendants, and to see that they are otherwise made as comfortable as possible. It is only in this way that a good class of persons can be attracted to the service, and, what is of even greater importance, induced to remain in it.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Guisboro' District.—Dr. W. W. Stainthorpe issues separate reports to the several sanitary authorities in the Guisboro' Union. In both the urban and rural portions of the district he calls attention to the frequency with which the ordinary midden-privy serves as a means for conveying the spread of enteric fever, and he urges the adoption of movable receptacles beneath the privy seats. Under such a system the infection of such a disease as enteric fever is localised, the contents of each receptacle can be disinfected, a fresh receptacle can replace the one needing disinfection, considerable facilities are experienced in the process of scavenging, and, above all, an end is put to that system which has led to so much preventable disease—namely, the system of storing up large quantities of excrement and refuse in close proximity to dwellings. The improved system needs, however, regular arrangements by the sanitary authority itself for systematic and frequent scavenging. Some progress is being made in the several portions of the district as to this matter of excrement and refuse disposal, but it is slow considering the number of years since the shortcomings of the present system were pointed out, and especially in view of the fact that in some parts of the district proprietors have, by their own action, afforded abundant proof to the authorities of the great advantages which have followed on the adoption of a different system from that of the common midden-privy.

Hartismere Rural District.—The death-rate for this district, which has a population of some 13,500, was as high as 18·4 per 1000 last year. Scarlatina was widely prevalent in a mild form, and ten separate outbreaks of diphtheria occurred, three of these being at Mellis. The first two were comparatively isolated and were very limited in their distribution; the third, however, was on a wide scale, and was probably the result of personal infection under local conditions calculated to favour the spread of the disease. The result both of this prevalence and of the scarlet fever outbreak points strongly to the need of some means for the immediate isolation of first attacks of infectious disease. The death-rate for the parish of Mellis has been worked out by Dr. Edgar Barnes for a long period, and it appears that the average for the past twenty-three years reaches as high as 23·5 per 1000. The sanitary condition of the place, as described in connexion with the diphtheria outbreak, indicates many easily removable conditions calculated to injure health, and the extreme dampness of the large green around which the houses stand points also to the need for a system of subsoil drainage. The standard districts of the Registrar-General only have a death-rate somewhat over 16·0 per 1000, and this although some are urban and contain a larger population than the whole of this rural district put together. Mellis, on the other hand, only contains some 500 souls.

Romford Rural District.—Mr. Alfred Wright in his annual report for this district during 1882, gives a very complete tabular account of the measures which he has carried out with a view to prevent the spread of infectious diseases, disinfection of premises and articles, together with removal to hospital being frequently effected. Reference is made to the sanitary circumstances of Barking amongst other places. The town is in part drained by imperfect and badly ventilated sewers discharging into the Creek at low water only, the sewers are so laid with regard to level that many houses cannot drain into them, and the newest portion of the town is a privy and cesspool district. It is said that though more has been done for this locality during the past two years than had been effected during the preceding twenty years, yet that the inhabitants have not the grace to acknowledge it. We have no wish to underrate the value of what has been done, but it is hardly possible to conceive that the existing sanitary conditions of Barking, a town of some 9500 inhabitants, can be too emphatically condemned by the inhabitants, if they are correctly described by the medical officer of health. There may be difficulty in providing the remedy at the present stage, but the conditions themselves are none the less injurious and burdensome. The death-rate of the entire rural district exhibits a tendency to decline steadily; it now stands at 17·4 per 1000, and the improvement may fairly be regarded as due in some measure to the active sanitary action which has been taken in the matter of nuisance removal, provisions against infection, &c.

Kirkleatham (Urban).—This small urban district, which had, at the time of the last census, a population of only 3898 persons, is in close proximity to Redcar, a favourite seaside resort on the Yorkshire coast. The medical officer of health, Mr. W. Walker, in his report for 1882, calculates the birth-rate in Kirkleatham to have been 31·0, and the death-rate 14·8 per 1000 of the population. The report states that 7 of the deaths were of non-residents (the precise definition of "non-resident" is not given), and that by deducting these deaths, and also one from "premature birth" (on what ground this death should be deducted is not stated), the death-rate may be reduced to 12·8 per 1000. Only 2 deaths resulted from infectious diseases, giving the low zymotic rate of 0·25 per 1000; and the proportion of infant mortality was also satisfactorily low. These facts afford favourable evidence of the sanitary condition of the district. We notice that Mr. Walker, in his report, states that the deaths of persons aged one year and under sixty years were only at the rate of 6·5 per 1000. This evidently means per 1000 persons at all ages. This rate is valueless for comparative purposes; rates of mortality at groups of ages should, to be useful, be calculated upon the numbers living at the same groups of ages.

Lytham (Urban).—The population of this favourite little Lancashire watering-place is estimated by the medical officer of health (Dr. L. Fisher) in his report for 1882 at 4230 persons in the middle of that year. The birth-rate last year appears not to have exceeded 27·2; whereas Dr. Fisher calculates the "corrected" death-rate of the district to have been so low as 10·1. It should be an invariable practice in health reports, when corrections are made, by excluding the deaths of non-residents, to state precisely the principle which governs the definition of the terms resident and non-resident. Dr. Fisher deducts on this account 15 of the 58 deaths occurring within the district during last year. It is satisfactory, however, to know that the death-rate in the district in 1882, without any correction, did not exceed 13·7 per 1000. Infant mortality was low, and the death-rate from the principal zymotic diseases did not exceed 1·9 per 1000, scarlet fever causing 4 deaths. The report also speaks favourably both of the condition of the drainage and of the quality of the water-supply. All these facts should recommend themselves to the notice of persons proposing to visit this health resort.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5816 births and 3745 deaths were registered during the week ending the 12th inst. The annual death-rate in these towns, which had steadily declined in the six preceding weeks from 29·2 to 21·7 per 1000, rose again to 22·7 last week. During the past six weeks of the current quarter, the death-rate in these towns averaged 23·5 per 1000, against 21·5 and 22·4 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 15·0 in Bradford, 17·7 in Derby, 17·9 in Bristol, and 19·8 both in Portsmouth and Sunderland. The rates ranged upwards in the other towns to 26·5 in Sheffield, 29·0 in Huddersfield, 30·7 in Liverpool, and 32·9 in Hull. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 386 last week, against 344 and 362 in the two previous weeks; they included 99 from measles, 76 from scarlet fever, 97 from whooping-cough, 44 from "fever" (principally enteric), 42 from diarrhœa, 18 from diphtheria, and 10 from small-pox. No death was referred to any of these zymotic diseases either in Derby or in Wolverhampton; while the highest

death-rates from these diseases occurred in Halifax and Hull. Measles was proportionately most fatal in Bristol and Liverpool; scarlet fever in Halifax and Sheffield; whooping-cough in Plymouth and Hull; and "fever" in Portsmouth and Birkenhead. The 22 deaths from diphtheria in the twenty-eight towns included 13 in London. Small-pox caused 4 deaths in Newcastle-upon-Tyne, 3 in London, 1 in Birmingham, and 1 in Leeds. The number of small-pox patients in the metropolitan asylum hospitals, which had been 73 and 78 on the two preceding Saturdays, was 77 at the end of last week; 9 new cases of small-pox were admitted to these hospitals during the week, against 7 and 14 in the two previous weeks. The deaths referred to diseases of the respiratory organs in London, which had declined in the six preceding weeks from 672 to 371, rose again to 402 last week, and exceeded the corrected average by 78. The causes of 94, or 2·8 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Plymouth, Derby, and Birkenhead. The proportions of uncertified deaths were largest in Wolverhampton, Oldham, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 27·6 and 25·0 per 1000 in the two preceding weeks, rose again to 26·1 in the week ending the 12th inst.; this rate exceeded by 3·4 the mean rate last week in the twenty-eight English towns. The rates in the Scotch towns ranged from 15·3 and 16·3 in Edinburgh and Perth, to 31·1 and 31·3 in Glasgow and Greenock. The deaths in the eight towns included 116 which were referred to the principal zymotic diseases, showing an increase of 26 upon the number in the previous week; these deaths were equal to an annual rate of 4·9 per 1000, which was no less than 2·6 above the mean rate last week from the same diseases in the large English towns. The 47 deaths from measles showed a further increase upon recent weekly numbers, and included 33 in Glasgow, 5 in Leith, and 4 in Edinburgh. The fatal cases of whooping-cough, which had declined from 57 to 25 in the eight previous weeks, rose again to 31 last week, of which 14 occurred in Glasgow, 5 in Edinburgh, 5 in Dundee, and 4 in Leith. The deaths from scarlet fever also showed an increase, and included 8 in Glasgow, and 2 both in Edinburgh and Aberdeen. The deaths attributed to diphtheria, which had been 12 and 4 in the two previous weeks, rose again to 10 last week, of which 7 occurred in Glasgow and 2 in Greenock. The 5 deaths referred to "fever," including 4 in Glasgow, were again considerably below the average. The deaths from acute diseases of the lungs in the eight towns, which had been 119 and 132 in the two previous weeks, were 121 last week, and exceeded by 8 the number in the corresponding week of last year. The causes of 111, or nearly 18 per cent., of the deaths registered in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 31·2 and 34·0 per 1000 in the two preceding weeks, declined again to 31·6 in the week ending the 12th inst. During the first six weeks of the current quarter the death-rate in this city averaged no less than 34·5 per 1000; whereas the mean rate in London and Edinburgh during the same period did not exceed 22·6 and 20·3 respectively. The 212 deaths in Dublin last week showed a decline of 16 from the number in the previous week, and included 12 from "fever," 4 from whooping-cough, 3 from measles, 1 from diarrhœa, and not one either from small-pox, scarlet fever, or diphtheria. Thus 20 deaths resulted from these principal zymotic diseases, against 18 and 14 in the two previous weeks; they were equal to an annual rate of 3·0 per 1000, against 2·3 and 2·4 from the same diseases in London and Edinburgh respectively. The deaths referred to "fever," which had steadily declined in the six preceding weeks from 13 to 4, rose again to 12 last week. The 4 fatal cases of whooping-cough corresponded with the number in the previous week; the 3 of measles, however, exceeded the number in any previous week of this year. The deaths of infants showed an increase, whereas those of elderly persons were less numerous than those in the previous week. The causes of 34, or more than 16 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Brigade-Surgeon R. W. Carter, Army Medical Department, having reported his arrival at Aldershot, has assumed the duties of sanitary officer of the Division, vice Deputy Surgeon-General J. Elkin, C.B.

ARMY MEDICAL DEPARTMENT.—Deputy Surgeon-General Edward James Franklyn, M.D., to be Surgeon-General, vice J. L. Holloway, C.B., deceased. Brigade Surgeon Leonard Kidd, M.B., to be Deputy Surgeon-General, vice E. J. Franklyn, M.D. Surgeon-Major John Henderson Whittaker, to be Brigade Surgeon, vice L. Kidd, M.B.

MADRAS MEDICAL ESTABLISHMENT.—To be Brigade Surgeons: Surgeon-Major Geo. Bidie, Surgeon-Major John Henderson, M.D.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Inspector-General of Hospitals and Fleets Sir John Watt Reid, K.C.B., M.D., Director-General of the Medical Department of the Navy, has been placed on the Retired List from the 10th inst. Fleet Surgeon Belgrave Ninnis, M.D., has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet, with seniority of May 5th, 1883.

Correspondence.

"Audi alteram partem."

THE SCOTCH CORPORATIONS AND THE MEDICAL BILL.

To the Editor of THE LANCET.

SIR,—Great is the present commotion in the camp of the medical and surgical corporations of Glasgow and Edinburgh. Their pretty bubble, long a tenacious soap film gilded with rainbow colours, is at length on the eve of being reduced to an obscure drop of liquid. How hard is the death of their system of bringing discredit on Scotch diplomas which has made the English and Irish corporations sneer so much! Why is it that so many Irish and English students and licentiates cross the Channel and the Border to reside for a few days in Edinburgh and Glasgow? It cannot be to profit by the medical education of these cities, for their period of residence is too short for that purpose. Do they not come merely for the purpose of obtaining a Scotch diploma? Is it because of the honour conferred by that diploma that so many Irish give their own corporations the "go-bye" and flock to the Colleges of Physicians and Surgeons of Edinburgh, and to the Glasgow Faculty of Physicians and Surgeons, or is it because the examinations held by the Colleges and Faculty in question have been so conducted that those who have little chance of passing examinations elsewhere take refuge with the kindly and considerate corporation examiners of Glasgow and Edinburgh? How modest and becoming is their boast that they yearly give more medical licences than the Scotch universities give medical degrees. They place that to their own credit. Those who know what they really are count it their shame. Does the Glasgow Faculty suppose that if it hides its small head in the sand that its feathers are not exposed to view? Did the Royal College of Physicians of Edinburgh suppose that no ill effect would eventually accrue to them when in their so-called "year of grace" they gave for a sum of money the diploma of physician to 200 English practitioners, licentiates of the Apothecaries' Society, and members of the London College of Surgeons, without subjecting them to even the shadow of an examination? Does the same college now regret having continued to sell its Fellowship simply for so many pounds until even a few years ago? Did they, when Medical Bills began to menace them, discontinue that practice from a co-feeling of alarm at its effects, or of shame at its results? Is the Royal College of Surgeons of Edinburgh not even to-day ashamed of continuing to sell its Fellowship without examination, even to men in England who wish to avoid the examination for the Fellowship of the College of Surgeons of London? How wise, no doubt, they would have shown themselves could they have seen themselves as others have seen them, and could they have measured the steadily growing indigna-

tion of the English and Irish corporations. Why do they wonder that their day of retribution has come at last, that they have been weighed and found wanting, and have been by the Government relegated to a position on the Medical Board for Scotland which is better than even they deserved? How are they to avert the humiliation which they have brought on themselves? Let them agitate, complain of injustice, accuse the Government of sacrificing them to conciliate the Scotch universities. Why not get the between three and four thousand licentiates they have showered on England and Ireland to come to their aid with monster petitions to Parliament? Surely these licentiates cannot have forgotten the considerate treatment of their examiners, or no-examiners? How small a return for their kindness it is to be asked merely to sign a paper testifying to the excellence of the examinations which they have themselves passed, and to the high character of the colleges whose diplomas they hold. Such support must no doubt remove all unpleasant impressions regarding them from the minds of the Government; and if the Government can only be sufficiently blinded to their imperfections, it may perhaps be possible even to upset the universities, and get a majority for the corporations on the Scotch Medical Boards. Why not? Did not the Government formerly give to the three Scotch corporations three members on the Medical Council, while it gave to the four Scotch universities only two members? Why not endeavour to bring about such a relation of numbers on the Medical Board for Scotland? No doubt, that disagreeable report of the Royal Commission blocks the way. But that may be overcome by convincing the Government that the Commissioners were blinded by prejudice, and resolved from the outset to ruin the Scotch corporations. If the Commissioners had but sat in Glasgow or Edinburgh, away from the pernicious influence of London, surely they must have acknowledged the eminent superiority of the Scotch corporations over the universities. Unfortunately for them it is rather more than probable that the Government will not be hoodwinked by empty words, and will prefer to judge them by their past deeds. Their reform should have come from within, and long ere this. Yours faithfully,

May 15th, 1883. M.D.

To the Editor of THE LANCET.

SIR,—You express the strongest approval of the clause in the Medical Bill that constitutes the Scottish Medical Board of *eight* university and *three* corporation members. You desire that the northern corporations should be placed in the ignominious position of having no longer an effective voice in medical affairs in Scotland, while in England and Ireland they and the universities are to be quite or almost equal in representation. In your opinion evidently the great services that this division of the kingdom has rendered to medicine have been wholly due to the universities, the corporations having only impeded and not aided in this work. So prejudicial would be the action of the representatives on the board of the 500 most eminent men of the profession in Scotland, who are the Fellows of these corporations, that you ask the Government to minimise their influence to the utmost, leaving to the forty medical professors of the few universities the whole control of medical teaching and examining.

Now, Sir, what are the real facts of the case with regard to these corporations?

1. They began and carried on education in medicines in Edinburgh and Glasgow for a century and a half before the universities took to it; and at a later period, when university monopoly had led to degraded teaching here and in Edinburgh, the Fellows of these corporations came to the rescue. In both cities extra-mural schools arose that, for three-quarters of a century, have never been inferior to the schools within the college walls. At the present time in Glasgow there are three complete schools under the wing of the Faculty of Physicians and Surgeons; and teaching the students of these are thirty-eight lecturers who are Fellows of the Faculty. In Edinburgh, from the two corporations, there are about forty Fellows who form the great extra-mural school. Is it really your wish that these eighty men engaged in such work should practically have no voice on the Scottish Medical Board? Do you desire that the university professors should in future govern with absolute sway, not only their own classes, but all the extra-mural schools as well? Will it, think you, tend to the advancement of medical education to place the eighty lecturers at the mercy of their rivals—sometimes bitter and envious rivals—the forty professors? If you do not know, I can tell you that no limpet ever stuck to a rock with half the persistence with which a Scotch professor holds on to a guinea. The policy you advocate will ruin their great schools; and the universities themselves will, from want of healthy rivalry, decline in importance. Englishmen will not, as at present, cross the Tweed in quest of professional training, but, on the contrary, Scotchmen will repair to English colleges for that instruction in medicine which in their own country will cease to be attainable.

2. As examining bodies the Scottish corporations, English opinion to the contrary notwithstanding, have done their work in a satisfactory manner. The London College of Surgeons until recently admitted candidates to the profession on an examination covering only *two* subjects of the curriculum, and even now it examines on only *five* of them. The corporations here have always examined on the whole of the *eight* subjects that have been prescribed for study. In the report lately made by the visitors appointed by the General Medical Council the examinations of the Faculty of Physicians and Surgeons were found not inferior to any conducted in London, and in one important respect superior to these.

3. For centuries the corporations have striven to advance the best and highest interests of the profession at large. The Faculty of Physicians and Surgeons spends several hundred pounds yearly on its library; it bestows lectureships and valuable prizes in encouragement of original research; its rooms are open for the meetings of, and its books for consultation by, the whole profession; and the same liberal policy has characterised the two great coporations in Edinburgh.

Surely, Sir, THE LANCET, that so long has been the eloquent and powerful advocate of liberal measures in medical politics, is not now to turn its back on this time-honoured policy by aiding the attempt of small coteries, college senates, to get into their own hands the whole power of the Medical Board; men who have immediate pecuniary interest in monopoly of teaching; men who are entirely irresponsible to the profession, and able to set at defiance even the voice of THE LANCET. I ask, Is it your wish that so small a clique should, by being an overwhelming mechanical majority on the Board, override, rough-shod, the entire profession in Scotland? In England and Ireland the corporations are to preserve their true positions; and surely, Sir, you will encourage Scottish members of Parliament to see to it that the corporations of their country shall not suffer the disgrace that the Bill in its present form will inflict on them.

I am, Sir, your obedient servant,

D. C. M'VAIL.

Western Medical School, Glasgow, May 14th, 1883.

"THE PICRIC ACID TEST FOR ALBUMEN."

To the Editor of THE LANCET.

SIR,—As the picric acid test for albumen has of late attracted some attention, it may be as well to state that it has been in constant use at the Westminster Hospital for the last seven years. I did not know that there was anything original about it. I first heard of it from Dr. Charlton Bastian nearly ten years ago. The following letter, in answer to an inquiry of mine, will show how he was first induced to use it.—Your obedient servant,

WILLIAM MURRELL, M.D.

Weymouth-street, W., May 15th, 1883.

20, Queen Anne-street, W., May 10th, 1883.

MY DEAR MURRELL,—It was, I believe, in the autumn of 1873 that I first began to use it, and from that period I have had a bottle containing a concentrated solution of picric acid in my consulting-room, which I have habitually used in testing urine for albumen. Before finally adopting it, I tested it with many specimens of urine; and one of the house-physicians, then in office, also tested it for me. His report was in accordance with my own experience—viz., that it was an unfailing test for revealing the presence of albumen in urine. I therefore gladly made use of it, and for several years carried a small stoppered bottle, containing

some of the saturated solution of picric acid, in my pocket. If anyone had asked me a few months ago what had led me to use this agent, I should have replied that I had seen it recommended in the *Archives de Physiologie*, by Ranvier. I have lately consulted the indices of the volumes of this periodical from its commencement in 1868 to 1875. I can only find one reference to picric acid, and that is in Vol. i. (1868), where there is a short article on this subject by Ranvier, who introduces it as an admirable substance for hardening certain tissues for histological investigation, and, in reference to this property, speaks of its power of precipitating albumen, comparing it with nitric acid. There is no mention in Ranvier's article about using picric acid to detect albumen in urine, or in any other fluid, so that, I suppose, I must have been induced to put it to trial in this direction on account of Ranvier's mention of its general property. Thus, although formerly under the impression that I had seen picric acid recommended as a test for albumen in urine, I am now unable to trace this impression to its source in any other way than that above indicated.

Very truly yours,

Dr. Wm. Murrell. H. CHARLTON BASTIAN.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

NEWCASTLE INFIRMARY.

IT is now stated in one of our daily papers that the medical board of our infirmary have made a recommendation to the House Committee that they should consider the question of making the institution free. It has been pointed out that the system works well in Sunderland and other large towns, and that its adoption here would tend to an increase in the popularity and usefulness of the hospital. It is said, however, that the proposal does not at present find much favour with the governors, as they fear that to throw open the place to all comers would tend to make it a purely town's hospital, and if filled entirely with Newcastle patients, to the exclusion of those from a distance, the country subscribers, who provide a large portion of the revenue, would be inclined to withdraw their support. The fears of the governors in this case are purely imaginary. It does not at all follow if the hospital were made free that it would be taken up by town patients, but there is every reason for supposing that the selection of patients would be fairer than the present system, which is open to many obvious objections. Nor would the revenue fail on the free system, for the hospital would then have higher and stronger claims to draw contributions from classes at present untouched. The reform is a necessary one, though no doubt it will be resisted for a time.

HOSPITAL FOR INCURABLES IN NEWCASTLE.

Our Schools and Charities Committee of the City Council has recommended the corporation, as trustees of the St. Mary Magdalene, to purchase suitable premises, called Moor Lodge, near the city, for the new hospital, which is at first proposed to accommodate twenty patients, to be increased as the revenue from certain leases augments the funds of the hospital. It is stated that the hospital of St. Mary Magdalene, which was situated at the outskirts of the town, owed its origin to Henry I., for the reception of lepers, but the earliest documentary evidence is a Bull of Confirmation from Pope Alexander IV., who occupied the Papal Chair from 1245 to 1261, although the institution was dissolved by the statute of 31 Henry VIII. It is stated that its revenues were continued on the report on the colleges and charities in the thirty-seventh year of King Henry VIII., on the plea, that "since that kind of sickness (leprosy) is abated the house is used for the comfort and help of the poor folks of the town, which chanceth to fall sick in times of pestilence." James I. granted a new charter, by which a chapel, which stood at the north end of Tyne Bridge, was incorporated with the hospital.

NEWCASTLE OMNIBUSES FOR LONDON.

I saw the other day five very fine omnibuses which have been completed here by and from the designs of Messrs. Atkinson and Philipson. The buses are intended to be drawn by two horses, to connect the central terminus of the London Tramways Company at the Elephant and Castle with the principal terminus of the North Metropolitan Tramways Company in South-place, Finsbury. They are constructed to carry twelve passengers inside and sixteen outside. The seats on the tops of the omnibuses are fixed on an entirely new principle. Instead of the usual seats at each side there are six small ones, each of which will seat two persons; and as the backs are reversible passengers can face the horses or otherwise at their convenience, and thus vary their position with the wind, &c., a point of some consequence in rough weather. The ventilation is exceedingly good, openings being placed at the top of each of the six windows as well as at the front end of the car immediately above the driver's seat. A noticeable feature in connexion with the buses is the ease by which a person may mount them, the steps being only about six inches from the ground.

Newcastle-on-Tyne.

EDINBURGH.

(From our own Correspondent.)

THE summer session commenced on May 1st, and the greater number of the classes are now made up. The university class rooms seem fuller than ever, and many of the extra-mural lecturers have very large classes.

Professor Grainger Stewart, who I am glad to hear is much better, is evidently not expected home for some little time. Dr. Affleck, the Senior Assistant-Physician to the Infirmary, has been asked to take his place and to share the clinical teaching with the other professors. It is a pity that this arrangement could not have been made last session, for there were frequent complaints amongst the students with regard to the clinical teaching.

The Medical Bill continues to excite great interest here. Unprejudiced persons generally acknowledge that while the universities of Scotland are justly entitled to a majority of votes on the proposed Divisional Board, the extra-academical schools both of Edinburgh and Glasgow should have some representation. The colleges, again, complain very bitterly that the proposed number of representatives which they are to receive is totally insufficient.

A propos the University and Extra-Academical School several letters have appeared in the *Scotsman*; some of them from extra-mural lecturers, others anonymous, complaining more particularly that there is not free-trade in teaching, but that students are constrained to attend the professors' lectures, knowing that if they go elsewhere they will have a bad time of it at the examinations. Other anonymous letters have appeared from university graduates who did take extra-mural classes, and who were treated, nevertheless, with the greatest fairness and courtesy by the university professors and examiners. It is unnecessary to refer to the tone of some of these letters, but it must be admitted that it is very unfortunate for the extra-academical lecturers that such an impression should prevail amongst the students.

SCOTTISH NOTES.

(From our own Correspondent.)

DEATH OF DR. BOASE, F.R.S., DUNDEE.

AT the mature age of eighty-three, and after a life of great activity unclouded till the end, Dr. Boase was removed a few days ago. The deceased gentleman was a graduate of Edinburgh, but, disliking the routine work of the profession, he never practised. Chemistry and geology were his favourite studies, and in these he distinguished himself highly, receiving his F.R.S. for the record of geological work done in Cornwall.

A DRAINAGE QUESTION AT FORFAR.

At a cost of over £20,000 this borough was drained a few years ago, and, certain parts of the system being already inefficient, considerable outlay is necessitated. In determining upon the best method of rectifying the evil, such excitement has been raised as seldom disturbs the even tenor of the municipal path in towns like Forfar. The lesson to other towns is in favour of doing drainage work most thoroughly, as in the end it is most economical; for had the pipes now proved useless been well laid and cemented,

the undermining and breakage could not have occurred. The commissioners now determine on a costly scheme, which bids fair to be effectual.

ABERDEEN UNIVERSITY.

Dr. Struthers, in his introductory lectures at Aberdeen, is in the habit of reviewing the position of matters in his own university, and comparing them with others at home and abroad. In this way he has in the public view laid his finger upon many weak points which one by one have been removed, so that in fulfilling his recognised function of finger-post to the institution he this year breathes complacently, and announces an almost perfectly equipped school according to modern ideas. It appears that additional courses of lectures are not so much the object of recent appointments as thoroughly practical work in the special departments of public health, lunacy, ear and throat diseases, and diseases of the skin. These in the capable hands of Drs. Simpson, Reid, M. Booth, and Garden, will be fully demonstrated; but Professor Struthers, while bearing willing testimony to the merits of these gentlemen, again took the opportunity of testifying to the enormous advantage to the university accruing from the Erasmus Wilson Chair of Pathology, and the work of its distinguished occupant, Professor Hamilton. In respect of this appointment Aberdeen stands alone among British schools of medicine, and takes rank with the universities of Germany. Referring to the medical schools generally, Dr. Struthers said that the more he saw of schools elsewhere the more he thought of the Scottish universities, the success of which he believed to be as deserved as it had been great. He paid a high compliment to Edinburgh as a school of scientific medicine, but stated that for years back Aberdeen had been no way behind any school in its scientific tone, and that it had over all schools known to him the advantage of thoroughly practical teaching, and professors not only devoted to their departments, but who devoted a large share of their time to their students, knew them well personally, and so promoted working habits in the school.

ROYAL COLLEGE OF PHYSICIANS.

AT an Extraordinary Comitia, held at the College on Thursday, May 17th, nine Fellows who had been elected at the last meeting were admitted, and Dr. William Osler (McGill Coll., Montreal) was elected Fellow. Dr. Garrod was elected on the Council in the room of Dr. Quain, resigned. Dr. Brown-Séquard was appointed Baly Medalist. It was decided that a conversazione should be held in June. The Finance Committee in their report, which was adopted, advised, in the existing state of medical legislation, against any hanges being made in the present salaries, and other charges. Dr. Dyce Duckworth and Dr. Ewart were appointed representatives of the College at the coming Congress at Amsterdam.

It was reported that the proposed application to the General Medical Council for approval of the scheme under which the two London Colleges are to be united, for the purposes of examination and qualification, had not been made, owing to its being understood that the Medical Council would not be able to give their approval whilst the scheme proposed several years since, in which many examining bodies are combined, remained in existence, although its provisions were not acted upon. It was agreed that the required one year's notice of withdrawal from this scheme should be given.

The consideration of the Council's Report on Special Examinations (Clauses 3 and 4) resulted in its being decided that registered practitioners shall be admissible, under conditions, to the special examinations for a certificate from the College in the subject of Hygiene and State Medicine. An effort was made to narrow the application of the arrangement to Fellows, Members, or Licentiates of the College; but this was unsuccessful, there being an evident feeling that the public good would be furthered by throwing the examination open to the profession at large.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Commons on Friday, the 11th instant, a petition in favour of the Infectious Diseases Notification Bill was presented from Paddington, and two against it from the British Medical Association and Dover. In favour of the Medical Act Amendment Bill two petitions were presented from the British Medical Association and one from Dover. A return was presented, on the motion of Mr. Talbot, of the number of deaths from starvation in the metropolitan district during the year 1882. An address was agreed to, on the motion of Mr. Stansfeld, for a copy of the correspondence between the Government of India and the Secretary of State in Council upon the Contagious Diseases Acts.

The Army Hospital Corps.

Colonel Alexander asked the Secretary of State for War if it was true that the officers of the Army Hospital Corps were now receiving lower rates of pay than any other departmental officers in the army; and, if so, whether he could state the reason why. Lord Hartington replied that officers of the Army Hospital Corps were placed on the same footing as quartermasters of infantry, and as their pay had only recently been raised he saw no reason to reopen the question.

The Dublin College of Physicians.

Colonel King Harman gave notice that on Tuesday, the 22nd instant, he will ask the Chief Secretary to the Lord Lieutenant of Ireland, whether, shortly after the passing of the Medical Act, 1858, the College of Physicians in Dublin issued a circular to their licentiates informing them that they would rank as M.D.'s of the said college; whether a ruling was afterwards made that licentiates of the King and Queen's College were not entitled to rank as M.D.'s; and, whether he can state what effect the Medical Acts Amendment Bill will have on such licentiates of the College of Physicians and of the King and Queen's College in Ireland.

Calf Lymph.

Mr. Hopwood gave notice that on the same day he will ask the President of the Local Government Board whether a memorial has been received by him from Mr. Henry Allen, of Holloway, respecting the death of his child, Mabel Emma, on April 19th, 1883, alleging that she died from the effects of vaccination with calf lymph from the Marylebone Institution; whether, as the inquest was held without a post-mortem or other evidence available to prove the cause of death, he will grant the prayer of the memorialist for an official inquiry; and whether it be the fact that calf lymph is usually followed by more inflammatory and severe effects than even human lymph.

Scotch and Irish Lunacy.

Amongst the notices of questions for which no day has been fixed is the following:—Mr. William Corbet, to ask the Lord Advocate if he will inquire into the circumstances under which Hugh Flanagan, a lunatic, was removed under warrant from Glasgow Asylum to Ballyshannon Workhouse as a pauper, the fact of lunacy being only referred to in an indistinct endorsement in red ink which the master said he overlooked; whether he is aware that Flanagan was discharged immediately from the workhouse and murdered his father; and whether he will suggest to the Scotch Lunacy Board the propriety of communicating beforehand with the Irish Lunacy Board in all similar cases in which it is proposed to transfer an insane person from Scotland to Ireland, in order that arrangements may be made to receive the patient direct into the proper asylum.

The House re-assembles on Monday, 21st inst.

THE DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—The annual meeting of the subscribers to this hospital was held on the 5th inst. From May 1st, 1882, to April 30th, 1883, 1919 patients have been admitted to the hospital; and of these 1662 have been discharged as improved, 95 were no better when discharged, 2 died, and 153 remained on the books. From the tables prepared by the resident medical staff it appears that of the 1430 cases of rheumatism proper 875 were males and 555 females. The subscribers were asked to confine their recommendations as much as possible to cases of a rheumatic character, and also to exercise care regarding the pecuniary circumstances of the patients recommended.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — The following gentlemen passed the Primary Examination for the licence (Chemistry, Materia Medica, &c.) on May 9th:—

Magnus Adler, Reginald Bean Anderson, Edward Harris Armitage, William Arnold, John Aspinall, Herbert Ward Austin, Arthur Bentham, Arthur Barry Blacker, Robert Welch Branthwaite, Eustace Augustus Barnside, Howard Decimus Buss, Gilbert Edw. Butler, Thomas Calrow, George Hedwig Carrington, Percy John Clark, Samuel Leonard Clift, Henry Robinson Codd, Henry Samuel Cook, John Henry Cox, Henry Charles Crew, Harold Lytton Cummings, Charles Drinkwater, Arthur Barthold Druitt, Henry Ascher Dutch, Sidney Reginald Dyer, Herbert Jekyl Dyson, Henry Percival Elkington, William Augustus Ellison, William Geo. Evans, James Alexander Fraser, John Marchant Fry, Matthew Richard Gooding, Henry Grattan Guinness, John Herbert Hacking, Vincent Ximenes Harcourt, George Hart, Bernard Frederic Hartzhorne, Henry John Hewer, Richard Lancelot Holland, John Douglas Hughes, William Huntington, George Arthur Ferdinand Inman, Herbert Francis Jackson, Percy Vaughan Jackson, Henry Daniel James, John Jenkins, David Llewellyn Jones, John Lea Walton Kitching, Maurice Koettlitz, Julius Labey, Caspar Robert Laurie, William John Lee, David Thomas Lewis, John Edward London, Charles William Low, William Corner Lysaght, Allan Jas. Macnab, James Malpas, Jas. Herbert Menzies, Albert Waldegrave Mitchell, William Murray, Montague Williams Oldham, Jas. Ronald Polson, Henry D'Arcy Power, John Dudley Price, Arthur Pring, Gerald Thomas Rawnsley, Henry Roberts, John Sanders Hughes Roberts, John Warden Sandoe, Geo. Reynolds Schofield Scott, Geo. Arthur Shackel, Henry Charles Costello Shaw, Edward Nodin Sheldrake, William Spong, John Richard Staddon, William Henderson Starr, Bertram Lyne Stivens, James Bryan Sutton, Anton Hugh Syrée, Wilberforce Thompson, Edward Reginald Tweed, Joseph Eagland Walker, Anthony Arthur Ward, Arthur Muriel Watkins, Edward Archer Wood, Alfred John Wright.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen, having passed the required examination for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Monday last:—

Camps, Samuel, L.R.C.P. Edin., Trinidad, West Indies.
Dodd, Anthony, L.S.A., Newcastle.
Dowsing, H. Leopold, L.S.A., Hull.
Doyle, E. A. Gaynes, Trinidad, West Indies.
Etches, W. Robert, Moreton-in-the-Marsh.
Gravely, Frank, L.S.A., Newick, Lewes.
Hathaway, H. George, L.S.A., Battle, Sussex.
Hitchcock, A. John, L.S.A., St. Heller's, Jersey.
Kay, Walter Smith, M.B. Edin., Sheffield.
Mitchell, Henry, L.S.A., Bradford, Yorkshire.
Morris, Albert, L.R.C.P. Edin., Teddington.
Nicholson, J. William, L.S.A., Cheltenham.
Peskett, A. Freeman, L.S.A., Leyton, Essex.
Philson, S. Cowell, L.R.C.P. Edin., Cheltenham.
Tatham, Edward, L.R.C.P. Edin., Hampstead.
Vann, A. Mason, L.S.A., Durham.
Walter, W. Ernest, L.S.A., Stoke-under-Ham.
Whitfield, D. William, L.K.Q.C.P. Irel., Oswestry.
Wilson, James, M.D. Dub., Moneymore.

The following gentlemen were admitted Members of the College on Tuesday last:—

Edgelow, Percy, Cambridge-street.
Gutteridge, Matthew Wilkins, Brook-street.
Maling, William Haygarth, Sunderland.
Martin, Albert, Wellington, New Zealand.
Roberts, Edward, L.S.A., Aberystwith.
Rogers, Frederick Arthur, Ealing.
Rowe, Arthur Walton, Margate.
Shorthouse, W. S. Noville, L.S.A., Croydon.
Smallpeice, William Donald, Queen Anne's Gate.
Stewart, Edward, Harley-street.
Walton, Francis Fielder, Hull.
Wilson, James, Wolverhampton.

The following gentlemen were admitted Members of the College on Wednesday last:—

Carter, Eustace George, Leeds.
Cockey, Edward Percival, Frome, Somerset.
Croft, Edward Octavius, Edward-street.
Fasken, E. R. Drummond, Kensington.
Forrest, John Rocheil, L.S.A., Fulham.
Harrison, Edward, Michael's Grove.
Oliver, Vere Langford, Harrington-road.
Polson, James Ronald, Bromsgrove.
Pulling, Herbert John, Ledbury.
Spong, John Fuller, Clapham.
Stephens, Samuel, L.S.A., Camborne, Cornwall.
Stokes, Francis Alexander, Highbury.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on the 10th, 11th, and 12th inst.:—

W. H. Paine, M. C. R. Böhrsmann, and D. C. M'Arthur, University College; J. A. Manton, E. O. Fountain, A. E. A. Pettingill, W. H. C. Candler, C. H. Conolly, B. D. Z. Wright, W. H. Stacey, N. J. Goodchild, R. E. Smith, C. T. T. Combe, and J. Hutton, St. Bartholomew's Hospital; A. E. Wilson, H. J. Blackler, R. C. Gowan, R. J. Harvey, D. A. Waite, P. N. Randall, H. Rockley, J. N. Phillips, C. N. Graham, E. W. Marshall, and G. F. E. Morgan, Guy's Hospital; H. S. Peeke, H. C. Hawkins, A. E. Chilcott, and M. Glanville, St. George's Hospital; C. C. V. Lyle, G. A. Pedley, J. Q. Bown, and J. D. Morton, St. Mary's Hospital; H. B. Lavies, F. S. Le Quesne, H. German, C. J. S. Kelsall, E. L. Hickey, and M. H. G. Lange, King's College; H. L. Swete, D. Williams, G. W. Blomfield, M. P. Ladell, F. Preston, M. Megginson, and C. D. Morris, London Hospital; M. Bates and R. D. Boase, Middlesex Hospital; W. W. Heelas and C. J. Ayres, Westminster Hospital; O. F. Frohwein, G. Skill, C. B. Cranstoun, A. E. Olding, and G. Cranstoun, St. Thomas's Hospital.

Of the 169 candidates who were examined during last week, 53 failed to satisfy the Board, and were referred for three, and 9 candidates for six, months' further anatomical and physiological study.

UNIVERSITY OF CAMBRIDGE.—The following gentlemen have passed the examination for the degree of Bachelor in Surgery:—

Morrison, B.A., Christ's.
Wallis, B.A., Gonville and Caius.
Ward, M.A., Trinity.

UNIVERSITY OF DUBLIN. — The following degree was conferred on the 2nd inst.:—

BACHELOR IN MEDICINE.—William Hamilton Allen.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on May 10th:—

Bowhay, Albert, Albaston, Calstock, Cornwall.
Gittings, Alfred, Wednesbury-road, Walsal.
Hobbes, Thos. Geo. Fosbroke Rice, Clent, Stourbridge.
Hutchison, John, Westmoreland-road, Newcastle-on-Tyne.
Kite, Edwin Whitfield Dawson, Highfields, West Bromwich.
Leach, Alfred, The Hospital, Rotherham.
Parkes, Jas. Stephen, The Manse, Stourport, Worcestershire.
Stevens, Francis Joseph, Elm Lodge, Hammersmith.
Stevenson, William Dymes, Camberland-road, Kew.
Walter, Walter Ernest, Stoke-under-Ham, Somerset.

THE Hospital Saturday Seaside Convalescent Home for Working Men is expected to be opened about Midsummer next.

UNWHOLESOME MEAT.—At Worship-street Police-court, last week, a butcher was sentenced to three months' imprisonment with hard labour for having on his premises a quantity of bad meat intended for sale to the public as food in the form of sausages.

TESTIMONIALS.—On his retirement from practice Mr. H. S. Hughes, M.R.C.S., L.S.A., of Bromley, Kent, received from his old patients a testimonial in the shape of a silver tea and coffee service, of the value of £300.——A large number of the inhabitants of Tavistock have presented Dr. R. W. Crighton with a testimonial, in token of their respect on his leaving the town, but especially as an acknowledgment of his thirteen years' gratuitous professional labour in connexion with the public dispensary.

SANITARY INSTITUTE OF GREAT BRITAIN. — At the annual general meeting of the Institute held at 9, Conduit-street, W., on Monday, May 7th, Prof. F. de Chaumont, M.D., F.R.S., in the chair, a report was presented by the council on the progress of the Institute and on the work achieved at the congress and exhibition held at Newcastle in the autumn of 1882. The chairman gave an address, and the officers for the ensuing year were elected, the President being His Grace the Duke of Northumberland, P.C., and the trustees Sir John Lubbock, Bart., D.C.L., F.R.S., Thomas Salt, M.P., and Dr. B. W. Richardson, F.R.S.

THE LATE MR. B. W. RICHARDSON.—At a meeting of the medical board of the Adelaide Hospital, Dublin, held on Friday, the 4th inst., Dr. H. Head in the chair, the following resolution was unanimously adopted:—"That the medical board of the Adelaide Hospital desire to record their deep regret at the death of Mr. B. Wills Richardson, who has been a valued member of the staff of this institution since its recognition as a clinical hospital. His strictly punctual and conscientious attention to his duties, his honourable conduct, and his uniform regard for the interests and reputation of his colleagues, caused Mr. Richardson to occupy the highest place in the regard of the members of the medical staff. They ever reposed the most perfect confidence in his honour, and cannot but feel that his death will be an almost irreparable loss to them and to the poor, in the treatment of whom he never spared time or trouble, and they wish to convey to Mrs. Richardson and his family their sincere sympathies in their bereavement."

BRISTOL CHILDREN'S HOSPITAL.—The seventeenth annual meeting in connexion with this hospital was held on the 5th inst. During the past year 405 children and seven women have been under treatment in the hospital, while 787 women and 2086 children have attended as out-patients. To complete the new buildings and for the erection of fever wards £7000 is still needed, in addition to the £7400 already subscribed or promised, and the committee earnestly appeal for further donations and for larger annual subscriptions. The average cost per occupied bed in the hospital during the last twelve months was £28.

ROYAL VISITS TO HOSPITALS.—On Saturday last the Duchess of Connaught visited King's College Hospital, and was conducted through most of the wards, beginning with the Tantia Ralli Ward for little children, under the charge of Dr. Playfair. Her Royal Highness manifested great interest in the condition of many of the patients, and afterwards visited the chapel and other parts of the hospital. The Duchess of Edinburgh, attended by Lady Harriet Grimston and Major Poore, visited the Royal Hospital for Children and Women, Waterloo-road, on Tuesday afternoon. The secretary and resident medical officer were in attendance, accompanied by the chaplain and sister superintendent.

SANITARY ASSURANCE ASSOCIATION. — At the recent meeting of this association Mr. Henry Rutherfurd delivered an address on Sanitary Assurance from a householder's point of view, in which he pointed out what enormous pecuniary loss was sustained by the prevalence of diseases arising from neglected house sanitation, and earnestly impressed upon his audience the desirability of having their houses inspected properly and reported on by a competent authority. At the close of the address a resolution was unanimously carried to the effect that the council of the association be requested to consider whether they cannot recommend legislation compelling the builders of all new dwellings to obtain a certificate from some authority or qualified person as to their sanitary condition before it shall be lawful for such buildings to be inhabited.

THE NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—A meeting of the members of the North-Western and Yorkshire Associations of Medical Officers of Health was held on the 11th inst. in the Manchester Town Hall. Dr. R. Angus Smith, F.R.S., read a paper on "Water Analysis," illustrating it by the exhibition of a number of phials containing water which had been subjected to a process (Koch's gelatine process) by which the organic matter it contained had been rendered visible. Mr. P. Vacher (Birkenhead) next read a paper on "Tenement Hospitals." A tenement hospital—so-called from its resemblance to a tenement house—would, he said, be a building, rooms in which would be let on weekly hire to patients, each one of whom would be attended by a nurse. The hospital would be under the general care of the medical officer of health of the district, who would visit it daily. There would be no necessity for a central administrative, as each floor or storey would be a little hospital complete in itself. These hospitals would be for the better class of patients who could afford to pay for their accommodation.

BOOKS ETC. RECEIVED.

BAILLIÈRE, TINDALL, & COX, London.

The Mineral Waters of Europe. By C. R. C. Tichborne, LL.D. &c., and Prosser James, M.D. pp. 234.

BLAKISTON, P., SON, & CO., Philadelphia.

Alcoholic Inebriety, from a Medical Standpoint. By Jos. Parrish, M.D. pp. 185.

CASSELL & CO., London.

Elements of Histology. By E. Klein, M.D., F.R.S. pp. 352. With 181 Illustrations.

CHAMBERS & CO., St. Louis.

Labor among Primitive Peoples. By G. J. Engelmann, A.M., M.D. Second Edition, Revised and Enlarged. pp. 227. With Illustrations.

CORNISH BROTHERS, Birmingham.

The Pathology and Treatment of Diseases of the Ovaries. By Lawson Tait, F.R.C.S.Eng. Fourth Edition, Rewritten and greatly Enlarged. pp. 357, With Illustrations.

CHURCHILL, J. & A., London.

The Principles and Practice of Medical Jurisprudence. By the late A. S. Taylor, M.D., F.R.S. Third Edition, Edited by Thos. Stevenson, M.D.Lond. Two vols. pp. 727—657. With Illustrations.

Hospital Construction and Management. By Fred. J. Mouat, M.D., F.R.C.S., and H. Saxon Snell. In two Parts. Part I. pp. 140. With Plates and Plans.

Observations on Lithotomy, Lithotrity, and the Early Detection of Stone in the Bladder, with a Description of a New Method of Tapping the Bladder. By Reginald Harrison, F.R.C.S. pp. 71. Illustrated.

A Manual of Practical Hygiene. By E. A. Parkes, M.D., F.R.S. Edited by F. S. B. F. de Chaumont, M.D., F.R.S. Sixth Edition. pp. 730. With Illustrations.

On Curvatures and Disease of the Spine. By B. E. Brodhurst, F.R.C.S. Third Edition. pp. 120. Illustrated.

Materia Medica. A Manual for the Use of Students. By Isambard Owen, M.D. pp. 191.

HOUGHTON, MIFFLIN, & CO., Boston, U.S.A.

Medical Essays, 1842-1882. By Oliver Wendell Holmes. pp. 445.

JOHNSTON, W. & A. K., Edinburgh.

The Botanical Atlas: a Guide to the Practical Study of Plants. By D. McAlpine, F.C.S. Vol. II.: Cryptogams.

LIPPINCOTT, J. P., & CO., Philadelphia.

The Dispensatory of the United States of America. By Dr. G. B. Wood and Dr. F. Bache. Fifteenth Edition, Rearranged, thoroughly Revised, and largely Rewritten, by Dr. H. C. Wood, J. P. Remington, Ph.G., and S. P. Sadler, Ph.D., F.C.S. pp. 1928. With Illustrations.

LONGMANS, GREEN, & CO., London.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M.A.Cantab., and J. W. Hulke, F.R.S. Third Edition, in three volumes. pp. 1109—964—942.

A Manual of Pathology. By Joseph Coats, M.D. pp. 902. With 339 Illustrations.

Light Science for Leisure Hours. Third Series. By Richard A. Proctor, B.A.Camb. pp. 309.

On Sound. By John Tyndall, F.R.S. Fourth Edition. pp. 464. With Illustrations.

MACMILLAN & CO., London.

Inquiries into Human Faculty and its Development. By Francis Galton, F.R.S. pp. 267. With Plates and Illustrations.

Tables of Materia Medica: a Companion to the Materia Medica Museum. By T. Lauder Brunton, M.D. &c. New Edition. pp. 204.

PUTNAM'S SONS, New York.

Insanity, its Causes and Prevention. By H. P. Stearns, M.D. pp. 248.

Brain-Rest. By J. L. Corning, M.D. pp. 103.

SAMPSON LOW, MARSTON, & CO., London.

The High Alps in Winter, or Mountaineering in Search of Health. By Mrs. Fred. Barnaby. pp. 204. With Plates and Maps.

SMITH, ELDER, & CO., London.

A Guide to Therapeutics. By Robert Farquharson, M.P., M.D.Ed. Third Edition. pp. 373.

Névroses du Larynx; par le Dr. A. Gouguenheim.—Index Medicus, No. 3.—Disease of Putrescent Air; by Thomas Rowan.—The Botanical Atlas, Part XIII.; by D. M'Alpine, F.C.S.—Abdominal Hernia; by Rushton Parker, F.R.C.S. (Holden, Liverpool.)—Du Diagnostic du Cancer; par le Prof. W. Rommelaere. (Manceaux, Bruxelles.)—Mémoire sur la Prévention de la Cécité; par M. le Dr. Fieuzal.—Vegetable Alkaloids and the Methods of their Separation; by Matthew Hay, M.D.—Good Words and Sunday Magazine, May.—Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper, May.—To-day, No. 1.—The Quarterly Journal of Inebriety, April.—Over-legislation in 1883.—Temperance and Total Abstinence; by Spencer Thomson, M.D.—Descriptive Catalogue of the Pathological Museum, Liverpool.—Principles of Health in Childhood, Manhood, and Old Age; by Louis King, M.R.C.S. (Hamilton, Adams, & Co.)—Sanitary Contrasts of the Crimean War; by Surgeon-General Longmore, C.B. (Griffin & Co.)—Buxton as a Health Resort; by J. C. Thresh, D.Sc., F.C.S.—Pathology and Morbid Anatomy of Tubercle; by Dr. N. Senn.—The Opium Habit, its Successful Treatment by the Avena Sativa; by E. H. M. Sall, M.D.—On the Occurrence of the Bacillus Tuberculosis in Tuberculous Disease; by T. M. Prudden, M.D.—First Annual Report of the Provincial Board of Ontario, for 1882. (Robinson, Toronto.)—Herbert Spencer on American Nervousness; by Dr. G. M. Beard. (Putnam's Sons, New York.)—On Milk and Milk Pollution; by Dr. J. Dougall.—Health Lectures for the People, Nos. 6 & 7.—Lecture on Alcohol, by J. B. Cargeeven, M.R.C.S.—Address on the Treatment of Pulmonary Consumption; by Dr. McCall Anderson.—Clinical Notes in West Africa; by Wm. Allan, L.R.C.S.I.—The History of Shakespeare's Brooch.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BROWN, F. GORDON, M.R.C.S., L.S.A.Lond., has been appointed Honorary Medical Officer to the Hospital Saturday Seaside Convalescent Home for Working Men.

DAVIES, EDWARD, M.D. St. And., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Northern Division of the Wrexham Rural Sanitary District.

DAVIS, ARTHUR PERCY, M.R.C.S., has been appointed Medical Officer for the Towey District of the St. Austell Union.

EDWARDS, H. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed a House-Surgeon to the Royal Infirmary, Edinburgh.

FIELD, JAMES W., M.R.C.S., L.R.C.P.Ed., has been appointed Surgeon to the Great Indian Peninsular Railway at Bombay.

GRANT, J. DUNDAS, M.A., M.D., has been appointed Assistant-Surgeon to the Central London Throat and Ear Hospital, vice G. R. Stell, M.R.C.S., resigned.

GRAY, JOHN A., M.B.Lond., M.R.C.S., has been appointed Assistant Medical Officer and Dispenser at the Workhouse and Infirmary, Islington Parish, vice Shelswell, resigned.

HARPER, JOHN WILLIAM, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Stowmarket Urban Sanitary District.

HICKS, CHARLES CYRIL, M.D. St. And., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Workhouse of the Wokingham Union.

JAKINS, PERCY, M.R.C.S., L.S.A.Lond., has been appointed Registrar and Pathologist to the Central London Throat and Ear Hospital, vice J. Dundas Grant, M.D., appointed Assistant-Surgeon.

JONES, WILLIAM, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Southern Division of the Wrexham Rural Sanitary District.

JOYCE, WILLIAM, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Ashby-de-la-Zouch Urban Sanitary District.

KNIGHT, EDWARD, L.R.C.S.Ed., L.R.C.P.Ed., L.S.A.Lond., has been appointed House-Surgeon to the Western General Dispensary, Marylebone, vice O'Brien, M.B.Ed., resigned.

LAIMBEER, FRED. JAS., L.R.C.P.L., M.R.C.S., has been appointed Resident Medical Officer to the Liverpool Royal Infirmary.

LITTLETON, PHILIP R., M.R.C.S., has been appointed Medical Officer for the Ashbourne District of the Ashbourne Union.

MACKINTOSH, G. D., L.K.Q.C.P.I., has been appointed Medical Officer for the Hallaton District of the Uppingham Union.

MORGAN, GEORGE JOHN, M.R.C.S., has been appointed Medical Officer for the Fifth District of the Oswestry Incorporation.

SUTTON, Mr. FRANCIS, has been reappointed Public Analyst for the County of Norfolk.

WRAITH, OSWALD S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator to the Darwen District of the Blackburn Union, vice J. H. Wraith, resigned.

WRIGHT, ALFRED, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the First District of the Romford Union, vice Cunningham, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BECKINGSALE.—On the 9th inst., at Sidney House, Bedford-park, Chiswick, the wife of D. Loftus Beckingsale, M.D., of a daughter.

CHEYNE.—On the 9th inst., at King-street, Aberdeen, the wife of Dr. W. S. Cheyne, of a daughter.

DOCKRELL.—On the 13th inst., at Asylum-road, Old Kent-road, S.E., the wife of Morgan Dockrell, B.A.M.A.O. Dub. Univ., of a son.

LEFTWICH.—On the 7th inst., at Kennington-road, the wife of Ralph Leftwich, M.D., of a daughter.

SANKEY.—On the 13th inst., at Borsatton-park, Salop, the wife of Arthur O. Sankey, of a son.

MARRIAGES.

BARON—ROBINSON.—On the 9th inst., at Plymouth, Barclay J. Baron, M.B., C.M., late Assistant to the Professor of Pathology of the University of Edinburgh, of 12, Richmond Hill, Clifton, Bristol, to Janey, elder daughter of Whinfield Robinson, of Torrhill House, Ivybridge, Devon.

BRAND—FERGUSON.—On the 24th ult., at Fetteresso Parish Church, by the Rev. John Watt, Alexander Theodore Brand, M.B. and C.M. Aberd., Driffield, Yorks., to Amelia (Amy), third daughter of the late W. B. Ferguson, C.E., Aberdeen.

DEATHS.

ALLATT.—On the 14th inst., at 12, Pencester-road, Dover, Christopher John Robert Allatt, M.D. Trinity College, Cambridge, Fellow of the Royal College of Physicians, in the 80th year of his age.

ARNISON.—On the 10th inst., at Allendale Town, Northumberland, William Campbell Arnison, surgeon (retired), aged 85.

DRUITT.—On the 15th inst., at Strathmore-gardens, Kensington, Robert Druitt, M.D., F.R.C.P., F.R.C.S., in the 69th year of his age.

GILL.—On the 14th inst., at Canterbury, John Beadnell Gill, M.D., formerly of Dover.

ROBINSON.—On the 10th inst., Richard Rodd Robinson, M.R.C.S. (son of the late Ruby Vane Robinson, Lieutenant of the—now Royal—Marines, who was mortally wounded in Nelson's unsuccessful attack upon Teneriffe in 1797), in his 91st year.

WHATMOUGH.—Recently, at Cinderford, Charles Whatmough, M.D.Ed., M.R.C.S., aged 60.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, May 17th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 5.30 A.M.
May 11	29·89	N.W.	46	42	99	56	37½	·04	Fine
,, 12	29·89	S.W.	52	51	108	65	42	·28	Raining
,, 13	29·87	S.W.	65	56	112	70	50	..	Fine
,, 14	29·85	S.W.	60	55	82	64	52	..	Cloudy
,, 15	30·10	W.	59	54	92	60	53	·09	Hazy
,, 16	30·31	N.E.	62	57	110	72	52	..	Fine
,, 17	30·42	E.	58	52	102	69	49	..	Fine

Medical Diary for the ensuing Week.

Monday, May 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, May 22.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—2 P.M. Annual Meeting.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Professor McKendrick, "On Physiological Discovery."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Garson, "On the Integumentary System of Mammalia."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Knowsley Thornton, "On a Case of Cysts in connexion with both Kidneys opened and drained, and Tumour of Right Ovary removed, the patient remaining in good health."—Dr. H. G. Rawdon, "On a Case of Nephrectomy for Rupture of Kidney, and Lateral Cystotomy for relief of Cystitis, caused by retained Blood Clots."—Sir Spencer Wells, "On a Case of Excision of an enlarged Cancerous Kidney."—Mr. Berkeley Hill will exhibit a patient after Nephrotomy for Calculus.

Wednesday, May 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thurs days, at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, May 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

ROYAL INSTITUTION.—3 P.M. Mr. R. S. Poole, "On Recent Discoveries in Egypt."

Friday, May 25.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Flower, "On Whales."

CLINICAL SOCIETY OF LONDON.—Dr. R. J. Lee, "On a Case of Nystagmus Infantilis."—Mr. A. E. Barker: 1. "On a Case of Goitre producing great difficulty of Breathing on Exertion; Excision; Recovery and complete Relief." 2. "On a Case of Sebaceous or Dermoid Cyst of the Tongue; Removal by Submental Incision; Cure."—Dr. Habershon, "On a Case of Ulceration of the Stomach at the Pylorus, in which Food relieved Pain."—The following cases will be exhibited:—Mr. J. R. Lunn: 1. Myxœdema, Male and Female. 2. Peculiar Deformity of Wrists, probably of rheumatic origin. Dr. D. Drewitt: Myxœdema. Dr. F. Taylor: Infantile Hemiplegia, with unusual Reflex Phenomena.

Saturday, May 26.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Turner, "On Russian Social Life."

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

MUSIC AS A THERAPEUTIC AGENT.

AT the request of the chief medical officer of the military hospitals of Paris, a regimental band has been detailed to play at each of the three hospitals one day in the week for an hour. It is hoped that the effect of the music will be to hasten the convalescence of the sick soldiers. Pity music is not more generally recognised as having charms to soothe not only the savage breast, but also the mind and body racked and enfeebled by disease.

UNQUALIFIED ASSISTANTS.

To the Editor of THE LANCET.

SIR,—From my disastrous experience of unqualified assistantships (for over five years), allow me to say that some provision preventing the employment of such unqualified men would be not only a service to the profession generally, but a positive boon to the men themselves. I speak from the point of view of the interests of the assistants, and I most emphatically say that in the majority of cases the becoming an unqualified assistant means utter professional ruin to any unfortunate man obliged to adopt this method of earning his living. Principals do not employ assistants from philanthropic motives, but to make them pay, and if a man is likely to suit it is against the interests of the principal either to pay him a salary large enough to save upon (and thus ultimately qualify), or to give him leisure sufficient for study. Most employers I have come across strongly deprecate anything that would tend to "unsettle" their assistants, such as legitimate ambition, &c.; and if they get hold of a man of plausible manner and good appearance, they take very good care that he will not be in a position to go in for "unsettling" examinations.

The truth is, this evil is intimately connected with the trade aspect of the medical profession, and, in my humble opinion, it is high time for the Legislature to interfere and abolish the employment of assistants, as also dispensing by medical men. A doctor's relations to his patients are necessarily of a personal nature, and he is not justified in undertaking a larger *clientèle* than he can personally attend to. It is a fraud for him to hand over a certain portion to the care of another, for if they seek the principal's services they are defrauded, and if they seek the (sometimes as, if not more, popular) assistant's services the assistant is defrauded, being made a tool and catspaw to earn what he is not allowed to enjoy. To take an example, such a one I have in my mind's eye:—Mr. X——, M.R.C.S., L.S.A., has a large practice, say in Manchester. He is a district medical officer of —— Union, surgeon to —— Dispensary, &c. The practice is worth about £2500 per annum profits, consisting very largely of clubs and working people. He keeps an assistant, a dispenser, a bookkeeper, and four collectors. He pays his assistant (out-door, married, and unqualified), who resides near the surgery, £100 per annum and house, and for this the assistant does all the disagreeable work—all the night work, his share of the midwifery coming to about 200 labours a year—and is factotum and general servant, while the principal manages to spend two days a week at least at Southport or Llandudno, goes out every evening after a certain hour, &c. I do not need to go on with the description, only to say that I am speaking of what I know and can vouch for the truth of. Also I should have mentioned that in the practice I am alluding to no holidays were allowed the assistant, one evening, from 6 or 7 to 11 at night, being all the relaxation necessary after a fortnight's work for him, and that the assistants generally stayed four to seven years.

Now, if dispensing were abolished, the excuse for this sort of thing would be taken away, and the public and profession benefited by the change. It would even be a step to prohibit the employment of any unqualified men, for the qualified would not allow themselves to be used after the above-mentioned plan, and as principals would find them not very "settled," they would gradually give up dispensing, and trust to more legitimate earnings.—I remain, Sir, yours obediently,

May 14th, 1883. UNQUALIFIED.

THE DURATION OF MEDICAL STUDY IN GERMANY.

AN association of medical men in Munich have, according to the *Union Médicale*, petitioned the Federal Council to prolong the time of study required of candidates for the degree of doctor in medicine, stating that, whereas only four years are now demanded in Germany, the period of undergraduate study is five years in Austria, and six years in Holland and the Scandinavian countries.

Rinderpest.—The cattle plague, or rinderpest, upon which Drs. Sanderson, Murchison, Bristowe, and Beale reported to the Royal Commissioners in 1866 has nothing in common with splenic fever. The conclusions then arrived at were that it was a specific fever, more nearly resembling human variola than any other human disease. We are not aware whether any micro-organisms have been found in it at all comparable with the bacillus anthracis.

Wm. J. Brown, A.B., M.B., T.C.D., &c.—From the statements sent us, we conclude that our correspondent's duty was to take and keep charge of the patients to whom he first was called, though he acted a dignified part in retiring rather than have a dispute before bystanders.

THE JAPANESE LACQUER POISON.

To the Editor of THE LANCET.

SIR,—The poisonous effects of Ampelopsis japonica (described by Mr. Owen Pritchard in THE LANCET of May 12th, 1883) are identical with those of the Japanese lacquer plant, Urushi (Rhus vernicifera). Almost all the workers in lacquer suffer repeatedly from an eruption consisting of irregular red patches, at first circumscribed, but afterwards more or less confluent, which soon tumefy, and generally form blisters. The contents of the latter, when not discharged at an earlier stage in consequence of scratching to alleviate the severe itching pain, become purulent, and dry up in scabs, under which sometimes shallow ulcerations appear. Severe headache, dizziness, fever, coated tongue, sickness, either diarrhœa or constipation (not constant), congestion of the conjunctiva and the mucous membrane of the nose, with watery discharge, accompany this eruption. It principally affects the more exposed parts of the body—face, neck, chest, arms, hands, and the bare legs of the natives. But not only those who are actually engaged with lacquer work suffer from this poisoning; those who live or sleep in rooms in which fresh lacquered goods are drying become affected. It often happens that a whole family, especially the children, after a night's rest in a room in which a newly purchased chest of drawers (almost the only piece of furniture in Japanese houses) has been placed, exhibit symptoms of lacquer poisoning the next morning. The Japanese call this affection "urushi rabure," of which words "urushi" means lacquer, and "rabure" to be infected—to have an eruption from coming in contact with something poisonous.

The lacquer is the inspissated sap of the stem and the leaves of "urushi" (Rhus vernicifera), which is believed to have been discovered by Prince O Usu (the national hero, Yamato Dake), son of the 12th Mikado Keiko Tenno, about 100 A.D. The berries of the same plant, like those of Rhus succedanea, yield the vegetable wax of which the Japanese candles are made, and which is imported for the same purpose into England.

Besides these varieties of sumach, there is a lovely creeper, Rhus semi-alata (Murray), identical with Rhus Osberii, D.C., which reaches to an altitude of 1700 inches and blossoms in September. The same species on the southern slopes of the Himalya is in flower three to four months earlier. The Rhus toxicodendron is also very common, but, like the Rhus vernicifera and Rhus succedanea, prefers hillsides and valleys.

London, May 14th, 1883. F. JUNKER, M.D.

C. R.—1. The qualifications of the candidates are not stated in the published lists.—2. We have no means of obtaining the information necessary to enable us to answer the second question.

X. Y. Z.—Our opinion on the professional dispute at Shaw was expressed in our issue of April 7th, page 622.

ANÆSTHETICS IN HOSPITALS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of to-day, in the article on the administration of anæsthetics in hospitals, I see that, in answer to Question 8 of the Committee appointed by the Glasgow Infirmary, it is stated that no deaths from chloroform have occurred at, among others, the Aberdeen Infirmary. I distinctly remember being present on one occasion in the operating theatre there, when the late Professor Pirrie was about to perform Wood's operation for the radical cure of hernia, and when the patient died on the table during the administration of an anæsthetic, and before the operation had commenced. This was about ten years ago. The case impressed me at the time, because I then first learnt that there are no coroners in Scotland. I have always believed that the anæsthetic used was chloroform, but of this I cannot speak with certainty. The case is doubtless fresh in the memory of many men who were senior students at the time, and who could supply this and other details. As it is, I have thought it worth while to record the fact of the death. In statistics, above all things, the first requisite is accuracy.

I am, Sir, yours obediently,

May 12th, 1883. SCRUTATOR.

OVERWORK OF RAILWAY SERVANTS.

"THE State Legislature of Pennsylvania" (says *Gaillard's Medical Journal*) "is now considering a Bill making it unlawful for any city railway officials to permit a conductor or driver to work more than twelve hours in a day, on penalty of imprisonment for not less than one month, and not more than six months." Something of the same kind is wanted in the British Isles.

F.R.C.S. (Birmingham).—The annual election of Fellows into the Council of the College of Surgeons will take place the first Thursday in July. There will be three vacancies declared caused by the retirement in the prescribed order of Messrs. John Birkett and Prescott Hewett, late Presidents of the College, who, it is stated, will not seek re-election; and Mr. Cooper Forster, Vice-President of the College, who will seek re-election.

Æsculapius.—An article in THE LANCET of Feb. 10th last gave a *résumé* of Dr. Rehn's cases of osteomalacia in childhood.

Utopian will find a good deal of information on the subject in an article in THE LANCET of March 13th, 1875.

CASE OF EMPYEMA CURED BY ONE ASPIRATION.

To the Editor of THE LANCET.

SIR,—I think the cure of empyema by a single aspiration is sufficiently rare to warrant my reporting the following case. I give the physical signs somewhat fully, as the absence of symptoms in anything like a corresponding degree is curious.

M. E. B——, a girl aged seven, was brought to me by her mother on May 11th, 1882, complaining of want of appetite and gradual loss of flesh, which had been observed for some weeks. No history of a recent acute illness. Her condition on examination was as follows:—Pulse 104; temperature (10 A.M.) 99·6°; respiration 32. The left side of the thorax was almost immovable during respiration, and the lower spaces on that side were flattened, but not bulging; vocal fremitus was absent, and the heart's apex beat was displaced about two inches to the right of the normal position. The percussion note was dull except close to the upper dorsal spines and about two inches below the clavicle in front. In the latter situation it was tympanitic. On auscultation there was silence in nearly the whole of the left chest except below the clavicle in front and near the spine posteriorly. On the right side the expiration was prolonged in apex, and some moist râles were audible at base.

On the following day I entered a small-sized needle in the eighth interspace, about three inches from the spine, and drew off with the aspirator fifteen ounces and a half of laudable pus. The lung expanded very quickly, but ten days later, when I sent the patient to the country, there was still dulness at the lower part of the left lung, but vesicular breathing was audible in the dull area. Her general health was much improved, her appetite fair, and she had gained four pounds in weight during the ten days since the operation. After staying for a month in the country she returned, apparently in perfect health, and has continued so up to the present time. The chest is now resonant throughout, and the breath sounds are normal everywhere. The only medicines used were syrup of iodide of iron and cod-liver oil.

With this case before me I cannot help thinking that simple aspiration might have had a fair trial in many cases where the more serious operation of establishing a drainage from the pleural cavity has been resorted to at the first.

I am, Sir, yours, &c.,

Norwood, May, 1883. WALTER WEIR, M.B.

A Country Surgeon.—The schemes for examinations under the new Bill are to come into force not later than March 1st, 1885, and the first final examination of medical students under the Bill is to be held not later than September 1st, 1885.

Mr. J. E. Parker.—The plan is adopted extensively, and with benefit, especially in whooping-cough.

F.R.S.—The question has been decided in the negative.

FEES TO REGISTRARS FOR COPIES OF DEATH CERTIFICATES

To the Editor of THE LANCET.

SIR,—A poor working man died a few days ago, and I filled up and signed the certificate of death. A relative went to the registrar, who, after giving a copy for the undertaker, said, "Did this man belong to any benefit society?" The relative said, "Yes, he did." "Then," the registrar replied, "you will want another copy, and my fee for it is 1*s.* 2*d.*" I want to know if it is any part of a registrar's duty to ask such a question, and if he can claim 1*s.* 3*d.* for a copy of a death certificate? If the relative had applied to me for the copy I should have given it, as I always do, without a question and without a fee. In my dispensary practice of thirty years I have written and signed many thousands of certificates of death, and given many thousands of copies of the same for clubs and benefit societies, but I have never asked for or received one penny for so doing. And yet I must say, if anyone is entitled to a fee for a copy of a death certificate, it is the doctor who writes the original one, without which the registrar could not give a copy or charge a fee.

I am, Sir, yours truly,

4th, 1883. A PHYSICIAN TO TWO DISPENSARIES.

RESEARCH WITH HUMANITY.

"WHAT sort of curiosity is it that good Lord Shaftesbury detests so extremely that he calls it hideous? Is it the sort of curiosity which prompted John Hunter to make those experiments and observations that led to so many improvements and advances not only in anatomy and physiology, but in practical surgery; the curiosity which likewise moved Sir Charles Bell to investigate the nervous system, and, for example, to discover the distinct origins and connexions of the sensory and motor nerves? Is the curiosity of wanting to know the secrets of animal life, with a view to the promotion of medical and surgical practice, 'hideous?' . . . Somebody tell the Earl of Shaftesbury, as to Sir Charles Bell's great discovery respecting the nerves, that it 'required an extensive series of experiments on living animals which long deterred him from carrying them into execution.' This, however, he was at length enabled to do through having invented 'humane methods of procedure,' for the gratification of a curiosity which surely no one but some one with such a very fixed idea, or fad, as vivisection on the brain can possibly account hideous. Given humane methods of procedure, and is scientific vivisection any more cruel than vivisection as practised in killing a pig? We do, as a nation, kill a good many pigs daily; but the doctors may really say:—'We don't kill a guinea-pig every day; or, if we do, we kill him by a comparatively very humane method of procedure.'"—*Punch.*

Enquirens.—The qualifications mentioned are neither of them surgical, and their holder is therefore not legally entitled to call himself a surgeon.

Dr. Stemen (Fort Wayne).—We cannot exchange.

ANTISEPTIC MIDWIFERY.

To the Editor of THE LANCET.

SIR,—Now that Listerism as a principle, or system of principles, is so well known and recognised by the medical and surgical world, it is, I think, incumbent upon every practitioner to carry it out in the practice of midwifery.

I have read with great interest the notes of the paper read by Dr. Williams, at the Harveian Society of London, and, as far as my experience goes, I can endorse the opinion he expresses with reference to the incorrect and deficient returns of mortality from puerperal fever. If the reduction in the mortality consequent upon the use of antiseptics in hospitals should not prove a sufficient inducement to every practitioner to try them, that inducement ought to be found in his own prospect of succeeding better in midwifery practice with them than without them, and this prospect is what every disciple of Lister's will at once assure him of. For some time now I have been in the habit of using carbolic oil of the strength of 1 to 15 for anointing the examining hand and fingers. After the examination I simply rinse the hand in warm water without using soap. By the time the child is born I have the oil applied over every portion of the hand and arm likely to come in contact with the maternal parts, so that should it become necessary to remove the placenta by inserting the hand and arm, they have become perfectly aseptic. After labour I give directions to change the bed and body linen on the second day, and the diapers every second hour for the first few days, and order the genitals to be thoroughly washed, morning and evening, with carbolic soap.

I am, Sir, yours truly,

Clayton-le-Moors, near Accrington, May 8th, 1883. C. R. ILLINGWORTH, M.B.

Mr. Stenhaus.—The paper has been received, and will appear shortly.

F.R.C.S. Ed. has not enclosed his card.

"HYDROPHOBIA."

To the Editor of THE LANCET.

SIR,—Last week's LANCET contained a letter from Mr. Harrison, the coroner for the borough of Leicester, giving an account of an inquest held on the body of a man called Toon, who died of hydrophobia, and in it he states that the dog which bit Toon is still alive and about. As the surgeon who saw the man soon after he was injured, and who first saw him when attacked with hydrophobia, and who had him removed to the Leicester Infirmary on recognising his symptoms, I naturally took a great interest in the case, and have come to the conclusion that the dog sworn to at the inquest as the offending dog was really not the one which bit the man at all, for these reasons: Toon was bitten between 5 and 6 on a dark January morning, and could not easily recognise the dog, a black retriever bitch; about the same time (either that day or the day after) I have been informed that a black retriever was destroyed as mad in the vicinity of Thurmaston; and Mr. Lee, the owner of the suspected dog, has given me the most positive assurance that his bitch was always shut up in the house all night as a guard to it, and that on no occasion has she been let out before seven o'clock in the winter. I do not in the least disparage the statement of Toon that it was Lee's dog that bit him, because Toon was a singularly upright and sober man, but I do contend that it was a case of mistaken identity on his part. The singularity of the case must be my excuse for troubling you with such a long note, as I believe it would be unique if the dog was not a rabid one.

I am, Sir, yours faithfully,

Syston, Leicester, May 15th, 1883. JOHN BAIRD.

"SANITATION AMONG CROFTERS."

To the Editor of THE LANCET.

SIR,—"Lochaber Axe" has, under the above heading, detailed his experiences of the position of a parochial medical officer in the North of Scotland. If you will kindly spare me space I will give you mine.

I was for some years one of that class, but now I am, like him, "no longer at the mercy or caprice of highland chieftains" or members of parochial boards. My fees in private practice were 1*s.* 6*d.* per mile, but my Board thought them extortionate, and drew up a scheme by which I was to be allowed the munificent sum of 6*d.* per mile. This I had to agree to or resign. I adopted the latter alternative. I, at the same time, wrote to the Board of Supervision, asking if my Board were not acting *ultra vires* in interfering with my private practice, to which I received an immediate answer that they were, and if they persisted in doing so the Parliamentary grant would be withdrawn. Still the Local Board had the power to dismiss me, without giving any reasons for so doing, and would undoubtedly have done so if I had not then and there resigned. The hire for a one-horse vehicle there was 1*s.* 3*d.* per mile, and still a Board, composed of landed proprietors, farmers, and clergymen used their position to put money into their own pockets, and to compel their medical officer to give themselves, their tenants, and dependents his services at less than half the price they paid to an ostler from an hotel with a one-horse vehicle, for a vehicle was required in one case as much as in the other.

In the present seemingly wavering state of mind of the Local Government Board as to whether they are to give guardians full powers to dismiss their medical officer at discretion, it is desirable that the working of similar powers elsewhere should be brought to light. As one having experience of Scotch and English Poor-law service, I would most earnestly urge on my English *confrères* to do everything in their power to prevent the calamity of being put into such a helpless and degraded position as their brethren in Scotland. When a Board composed of the *élite* of a parish would thus try to make private gain out of their public position, what could we expect from the class of men from which Boards of Guardians are generally selected?

To those who know how the tenure of the appointments of medical officers of health in small towns and country districts depends on the extent to which they interfere with property belonging to members of their board and council, or that of their friends, the making of district medical officers' tenure of office dependent on the goodwill of guardians will seem a retrograde step, and possibly disastrous to the paupers under their charge. I hold that, in the interests of the public, the paupers, and the medical officers, such a measure should be stoutly resisted, and that the sooner the Scotch system is assimilated to the English in this respect the better for all parties concerned.

Trusting you will use your powerful influence to prevent a change in the English law and to hasten a change in the Scotch,

I remain, Sir, yours respectfully,

London, May 15th, 1883. F.R.C.S. Ed.

"ABSENCE OF LOWER AND DEFICIENCY OF UPPER INCISOR TEETH."

To the Editor of THE LANCET.

SIR,—In answer to the query of Dr. Hamilton regarding a case of the above, I may say that in Tomes' Dental Surgery a similar account is given, but the child was entirely edentulous as far as concerns the temporary teeth; but the permanent ones were duly and fully erupted, thus answering the point raised by Dr. Hamilton. It would be very interesting if this gentleman could keep the case under his observation, and thus be able to notice whether the permanent teeth are at all singular. It is difficult to account for this aberration, but still more for the due appearance of the permanent successors, seeing that these latter seem to arise from an offshoot of the primary dental pulp or sac.

I am, Sir, yours truly,

Brook-street, W., May 14th, 1883. S. J. HUTCHINSON.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Joseph Fayrer, London; Mr. S. J. Hutchinson, London; Dr. Thin, London; Mr. B. Dash, London; Mr. Bird Vincent, East Dereham; Dr. O'Neill, Lincoln; Mr. Haygarth, Brighton; Dr. Whitson, Glasgow; Dr. Oliver, Harrogate; Mr. Hobson, London; Dr. Campbell Clark; Mr. Allam, London; Mr. Burgess, Spilsby; Dr. Herman, London; Mr. Davidson, Kaira; Mr. Jordan Lloyd, Birmingham; Mr. Robert Jones, Liverpool; Dr. Tuckerman, Wooster; Mr. Frank, Dublin; Mr. Lloyd Roberts, St. Asaph; Mr. Bremridge, London; Dr. W. H. Pearse, Plymouth; Mr. J. C. Parker, London; Dr. Batterbury; Mr. Lawson Tait, Birmingham; Dr. Kirk, Partick; Mr. Brown, Bromley; Mr. P. H. Kidd, Great Yarmouth; Dr. Junker, London; Mr. H. Parson, Guildford; Senor L. G. Gongalez, Jalisco; Dr. Silvester, Clapham; Mr. Allsop, Shipley; Messrs. Lea and Nightingale, Liverpool; Captain Leitham, Doncaster; Dr. Heelas, Buckhurst; Dr. Moffat, Brechin; Mr. Fox, Bristol; Dr. Bramwell, Edinburgh; Mr. Rust, Glasgow; Mr. Lamond, Glasgow; Mr. Whitford, London; Dr. Cook, Cheltenham; Mr. Davis, Bath; Messrs. Pocock Brothers, London; Miss Baker, Cambridge; Messrs. Barnes and Russell, Lichfield; Dr. James Arthur, Wingate; Mr. Phillimore, London; Mr. W. Allan, London; Mr. Symonds; Dr. Quinlan, Dublin; Mr. Baird, Scarborough; Mr. J. F. W. Silk, Leeds; Dr. Hayward; Mr. C. Meadows, Hastings; Mr. T. Holmes, London; Mr. Savory, London; Dr. Charles Orton; Mr. H. Morris, London; Mr. Murphy, Belfast; Dr. Pernisch, Grisons; Mr. Bowen, Birmingham; Mr. Crawford, Walker-on-Tyne; Messrs. Coates and Co., London; Messrs. Livingstone, Edinburgh; Mr. Messent, London; Dr. Duncan, Tarnes; Mr. M. A. Adams, Maldstone; Translator; G. H., Darwen; S. M. D.; H. W. T.; Amicus; Medicus; Scrutator; R. C.; Rinderpest; Utopian; A Country Surgeon; Riding Master; E. S. E.; Scapula; Anxious; A Physician to Two Dispensaries; A Country Practitioner; 1866; Enquirens; A St. Andrews M.D; L.R.C.P.L.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Fraser, Burnham; Messrs. Woolley and Son, Manchester; Mr. McGell, Holt; Mr. Graham, Malvern; Mr. May, Moreton Hampstead; Surgeon-Major Eddard; Miss Laurence, Kensington; Messrs. Donisthorpe, Exeter; Mr. L. Walker, London; Mr. Escreet, Hempstead; Mr. Johnston, Glasgow; Mr. Hoare, Stockton-on-Tees; Mr. Unsworth, Liverpool; Mr. Marcey, Padstow; Mr. Eldridge, Reading; Mr. Hayward, St. Helens; Mr. Jones, Bala; Mr. Salmon, London; Dr. Wallace, Preston; Dr. Kiddle, Droitwich; Dr. Cooke, Sheffield; Mr. Straton, Luton; Mr. Simmonds, Gravesend; Mr. Pemberton, Birmingham; Miss Dwyer, Southsea; Mr. Low, London; Mr. Dockrell, London; Mr. Handcock, Kensington; Mr. Corbitt, Tooting; Messrs. Porteous and Co., Glasgow; Mr. Wilson, Stockton-on-Tees; Mr. Reynolds, Liverpool; Mr. Morris, Campden; Mr. Browne, London; Mr. Evans, Putney; Mr. Laird, Gunnersbury; Dr. Roberts, Sheffield; Mr. Shaw, Chichester; Mr. Hendle, Wigan; Messrs. Jones and Son, Llanfyllin; Mr. Adams, Ipswich; Mrs. Stratton, Newport; Crux; Cortex; Mel; Vista; E. J., Rotherhithe; M.D.; B. L.; Alpha; B. Z. C., York; M. C., Westington; M.R.C.S.; Medicus, Leicester; F. R.; J. A. R., Southport; Devon; A. Z.; Theta; Dispensary; A. W. H., Hampstead-road; J. N.; Sigma, Biggleswade; Vade Mecum, Liverpool; A. B., Birmingham; Pierre-blanc, Patricroft; Surgeon, Tony Pandy; B. W.; A. B. C., Netley; P. K. S., Stroud; W. M. D., West Brighton; M.D., St. Ives; &c., &c.

Batley Reporter, Bendigo Evening News, Nottingham Daily Guardian, Hampshire Telegraph, Broad Arrow, Building and Engineering Times, Southampton Times, Manchester Guardian, Englishman, Keystone, Bolton Daily Chronicle, Dewsbury Reporter, Hull News, Birmingham Daily Mail, Chatham News, &c., have been received.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year ..... £1 12 6 | Six Months £0 16 3

TO CHINA AND INDIA ..... One Year, 1 16 10

TO THE COLONIES AND UNITED STATES ... Ditto, 1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications	£0 5 0
Official and General Announcements	0 5 0
Trade and Miscellaneous Advertisements	0 4 6
Seven lines and under (each averaging ten words).	
Every additional Line	0 0 6
Front Page ... per Line	0 1 0
Quarter Page	1 10 0
Half a Page	2 15 0
An entire Page	5 5 0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.